FORESTRY

FRDA REPORT 082

REGIONAL CHANGES IN THE B.C. FOREST INDUSTRY

by
Wayne Swanson

FOREST RESOURCE DEVELOPMENT AGREEMENT

Canada

BC

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FOREWORD

This report provides an overview of recent trends in the B.C. forest industry. The time period covered is long enough to include normal business cycles. Economic downturns of the mid-seventies and early eighties are readily apparent. Despite these recessions, the forest industry has continued to grow. Aspects of its growth are documented in the report.

Writing this report would not have been possible without the assistance of many people. The author would like to thank Anthony Britneff, Inventory Branch, B.C. Ministry of Forests, for providing current data on the status of the forest resource; Winston Wai and Viggo Holm, Industry Development and Marketing Branch, B.C. Ministry of Forests, for providing data on the structure of the forest industry and the production of pulp and paper; and Steve Miller, Central Statistics Bureau, B.C. Ministry of Finance, for providing the principal statistics on the pulp and paper industry. The author would also like to thank Rod Dobell, The Institute for Research on Public Policy, for reviewing an early draft and suggesting some policy implications.

REGIONAL CHANGES IN THE B.C. FOREST INDUSTRY

The purpose of this report is to identify regional changes in B.C.'s forest resource and forest industry since 1945. It describes broad changes in:

- the forest resource by region;
- the industry's use of the forest resource by region; and
- the structure of the forest industry.

The report also identifies some opportunities for Forestry Canada to generate programs that further develop the forest industry in the context of sustainable development.

Because of changing technology, economic conditions and environmental demands, the B.C. forest industry has undergone many changes since 1945. At that time, Chief Justice Gordon M°G. Sloan, in the first Sloan Commission report, recommended that the province adopt sustained yield as the basis of forest management. Since then, the B.C. government has commissioned two other public inquiries: the second Sloan Commission in 1956 and the Pearse Commission in 1976. The province also has conducted reviews of the provincial forest and range resources in 1979 and 1984. Each review indicates the state of forest resource and the industry at the time it was written.

The growth of the forest industry has been uneven. In 1945, forest industry activity was concentrated on the coast. However, since 1972, industry in the interior has harvested more timber than on the coast. The reasons for the shift are very complex and the subject of many indepth analyses. Therefore, this report provides only a general overview. It uses readily available statistics from Statistics Canada, Forestry Canada and the B.C. Ministry of Forests.

The report is organized into five sections:

- Literature Review
- The Forest Resource
- The Forest Products
- The Forest Industry
- B.C. Forests and Sustainable Development

LITERATURE REVIEW

In 1945, Chief Justice Gordon M°G. Sloan, Commissioner, submitted The Forest Resources of British Columbia, a report that became a milestone in forest administration. He recommended adopting a policy of sustained yield management. His objective was "to so manage our forests that all our forest land is sustaining a perpetual yield of timber to the fullest extent of its productive capacity."

Sloan recognized the need to ensure the performance of other functions--protecting watersheds, preventing soil erosion, providing recreation and scenic areas, and conserving fish and wildlife habitat. He stated that the objective could not be reached until the mature timber on the coast is replaced with a new forest.

On the basis of Sloan's recommendations, the province introduced the concept of sustained yield management and divided its forest land into "Working Circles." Some areas were to be managed by the forest industry under what later became Tree Farm Licence tenure. Other areas were to be managed in Public Sustained Yield Units which are now called Timber Supply Areas.

In 1955, Sloan was again asked to act as Commissioner for another inquiry into forestry resources in British Columbia. Although this report was more detailed, Sloan did not advance any radical changes. He felt that although some progress had been made in establishing sustained yield as a concept in forest management in B.C., it had not gone far enough. He suggested administrative changes to further encourage sustained yield management.

Through his recommendations, adjustments were made to the tenure system and more emphasis was given to planning forest resource development. The province developed cooperative agreements with the forest industry to promote forest management.

It took 20 years before another commission was called to review forest policy in British Columbia. Peter Pearse completed his review, Timber Rights and Forest Policy, in 1976. He acknowledged that the province had established the mechanisms for "sustained yield" forestry advocated in the two Sloan Commission reports. The emphasis in his report was on reconciling timber production with the growing demand for environmental protection and social values.

Pearse identified five issues that required immediate attention if the province was to realize the benefits from the forest resource:

- the need for clear resource management goals so that industrial and other forest users can plan and develop their operations;

- the need for an industrial policy to influence the distribution and structure of the forest industry;

- the need to provide contractual arrangements to ensure that the forest industry has supplies of timber to foster investment;

- the need to respond to changing circumstances by reordering commitments without invalidating contractual rights; and

- the need to develop administrative arrangements that are suited to local conditions.

Pearse was very concerned that the forest industry was becoming concentrated into fewer and fewer companies. He wanted a tenure system that encompassed small and large companies. The very large companies had surpassed the size needed for efficiencies of scale. Pearse noted that the ability of the industry to prosper depended upon its ability to use lesser quality timber at higher cost--given an externally generated price structure. He advocated developing markets for intermediate products to allow the industry more flexibility in industrial activity and in the use of the resources available.

On the basis of Pearse's report, the province revised the Forest Act in 1978. As part of that revision, the province called for periodic reviews of its forest and range resources. These reviews provide the data for the development of programs and budgets. The first resource analysis was completed in 1979 and the second in 1984. The next resource analysis is due in 1994.

The 1979 Forest and Range Resource Analysis identified five areas of concern:

- the loss of productive forest land to other uses;

- the need for integrated resource use objectives;

- the possibility of increasing the timber supply through better utilization of:
  - logging residues,
  - decadent cedar-hemlock stands,
  - hardwoods and
  - skilled labour to improve productivity, decrease breakage and improve felling and bucking practices;

- the need for a government policy on industrial development; and

- the lack of a mechanism for making decisions on forest land use.

The 1984 Forest and Range Resource Analysis had to deal with the realities of an economic recession. Levels of management had to be tempered to reflect economic conditions. With the recession, there tended to be overcutting in the better quality stands and undercutting in marginal stands. The basic silviculture requirements in the Forest Act were not being met.

The analysis showed that the forest resource could not support the present rate of harvesting and still meet long-term sustained yield objectives. A major concern of the Ministry of Forests was the extent to which management responsibility could be delegated to the forest industry.

Since the 1984 Forest and Range Resource Analysis, there were a number of policy changes that are having an effect on the forest industry. In response to the U.S. demands for countervailing duties, the province revised its stumpage system to charge companies more for the use of the resource. In addition, the forest industry must now pay the costs for silviculture treatments. To balance these additional responsibilities, the province is proposing to increase the number of area based tenures.

Each of the commission and resource analysis reports expressed concerns that are still relevant today. The basic tenet of sustained yield management requires a commitment to silviculture and maintenance of the productive land base. There is still a need to set resource management goals and establish industrial development policies. Over the years, forest management policies have helped to maintain the resource and foster industry development, but much work still remains.

THE FOREST RESOURCE

Forest policy must reflect the nature of the forest resource. The purpose of this section is to provide an understanding of the forests of B.C. and their regional variations.

The topography and climate of the province have created a number of ecological units. Because the windward slopes of the coastal mountains catch the Pacific storms, the slopes are very moist and warm. By contrast, the leeward areas of the interior are much drier, with hotter summers and colder winters. These different climatic conditions create very different types of forests. The trees on the coast are much larger and older than those in the interior. Differences in climate from north to south also alter forest growth. In the interior, the southern areas produce mainly lodgepole pine, while northern areas produce mainly spruce.

To assess the forest resource, the province was divided into three regions:

- the **Coast**, comprising Vancouver Forest Region and the coastal portions of the Prince Rupert Forest Region;
- the **South Interior**, comprising the Kamloops, Nelson and Cariboo Forest Regions; and
- the **North Interior**, comprising the Prince George and interior portions of the Prince Rupert Forest Region.

Where data could not be broken down according to these three broad regions, the statistics reflect the coast and interior differences. The emphasis in this report is on the period from 1963 on when statistics were collected to show regional differences.

The Forest Land Base

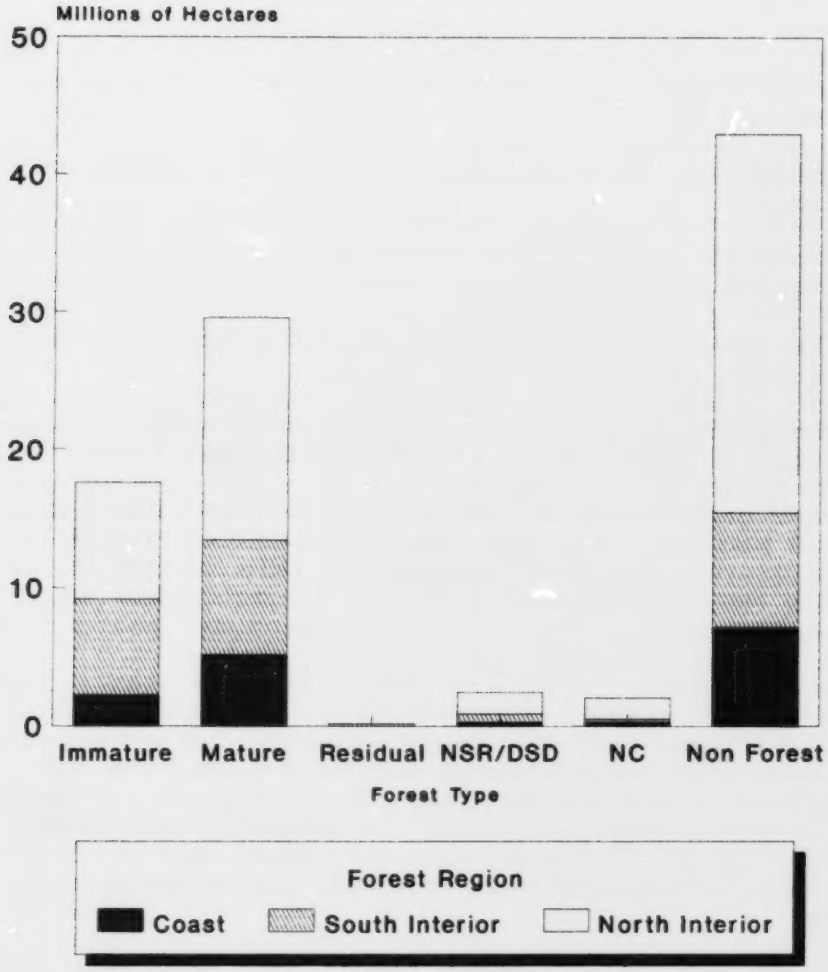
The land base does not change greatly. However, the definition of what constitutes forest land reflects the technology and values of the day. Technological advances since the Sloan reports have increased the amount of available forest land. The 1956 Sloan report recorded 30.35 million ha of forest land in the province while the current inventory records 51.8 million ha.

Figure 1 shows the current forest land base broken down by forest type (immature, mature, NSR/DSD, residual, non-commercial and non-forest) and region. The three regions differ from each other in many respects. The Coast region is still dominated by

mature forests while the North Interior includes large areas classified as non-commercial or non-forest. Non-commercial forests produce trees that do not have a commercial value at the present time. They are non-commercial because of species composition and characteristics that make them unsuitable for harvesting. These non-commercial areas can be brought into production if the technology and economics warrant their use.

Figure 1 Forest Land in B.C. - 1988

(Millions of hectares)



Source: Ministry of Forests

Not all of the forests will be used for timber production. Some will be used to meet social and environmental objectives. To estimate the area that can be used for timber, the forest areas are "netted down" through the B.C. Ministry of Forests' planning procedure to produce the "Net Productive, Available and Suitable" land base. Through this process, the forest land base is reduced by subtracting land alienations, environmentally sensitive sites, inoperable areas, problem forest types, non-commercial forests and lands that are not stocked. In the 1984 Forest and Range Resource Analysis, the 43.26 million ha of unalienated forest land were reduced to 21.29 million ha of "Net Productive, Available and Suitable" forest land. This is the area for which the province grants timber harvesting rights. Also, some of the alienated forest land is available for forest management.

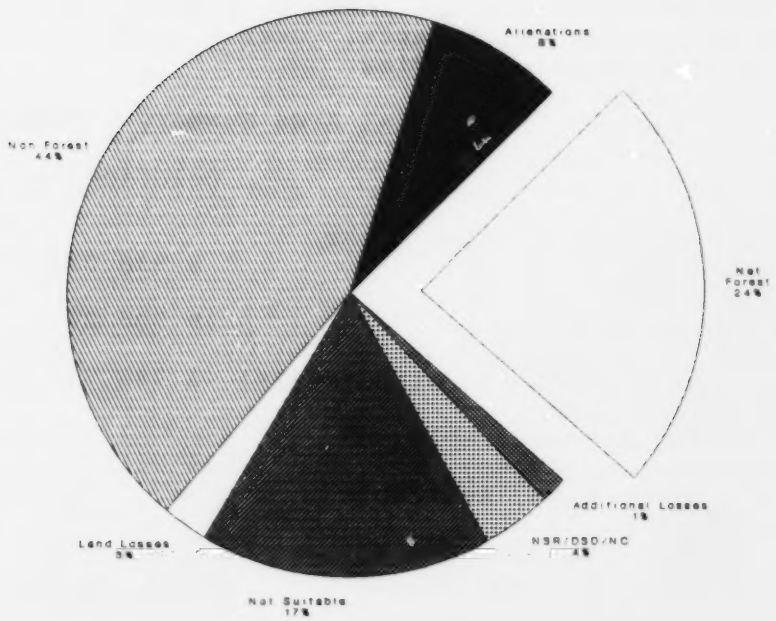
From a policy point of view, the question will arise whether or not it is possible to tap some of the area that has been "netted down." These are the inoperable areas, problem forest types and non-commercial forests. Over a third of the forest land falls into these categories.

Table 1 Provincial Area Summary - 1984

Category	Deletion	Net Area
Total Area - Excluding Major Parks		88 907 918
Alienations	6 938 022	
Unalienated Area		81 969 896
Non Forest Land	38 705 293	
Forest Land		43 264 603
Land Losses (ESAs and withdrawals)	2 383 746	
Available Forest Land		40 880 857
Not Suitable (Inoperable and problem forest types)	14 713 917	
Potentially Productive, Available and Suitable		26 166 940
Not Stocked (NSR/DSD and NC)	3 560 368	
Productive, Available and Suitable		22 606 572
Additional Losses	1 316 226	
Net Productive, Available and Suitable		21 290 346

Source: B.C. Ministry of Forests. Forest and Range Resource Analysis 1984. p. B4

Figure 2
Summary of Provincial Forest Areas- 1984
(Excluding Major Parks)



Source: 1984 Forest and Range
Resource Analysis
Ministry of Forests

Timber Volumes

According to the statistics contained in the commission reports, the amount of timber in the province is increasing. That is, the volumes that can be harvested have increased because of improvements in technology. The 1945 Sloan report estimated 1 152.88 million m^3 of timber; the 1956 Sloan report estimated 3 771.40 million m^3 of timber; the 1976 Pearse report estimated 8 082.18 million m^3, and present estimates are 9 243.14 million m^3. These are gross volumes in the inventory and do not indicate the volumes that are available for harvesting. The question remains: what are the limits of technological development? The 1979 Forest and Range Resource Analysis noted significant gains that could be made by more careful extraction of the resource.

Table 2 Provincial Volumes - 1989
(Millions of m^3)

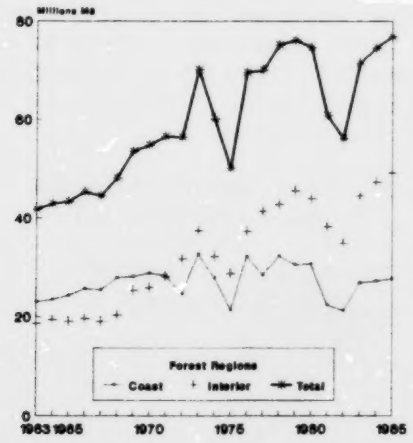
	Coast	South Interior	North Interior	Total
Douglas-fir	276.20	238.76	619.87	1,134.83
Cedar	715.85	122.82	50.01	888.68
Hemlock	1244.36	132.64	451.09	1,828.09
Balsam	497.35	213.95	918.65	1,629.95
Spruce	152.41	463.40	1172.08	1,787.89
Yellow Cedar	158.73	0.19	5.11	164.03
Larch	0.0	21.99	1.25	23.24
Total Conif. excl. Pine	3,044.90	1,193.75	3,218.06	7,456.71
White Pine	7.06	12.56	0.25	19.87
Lodgepole pine	23.50	552.03	844.56	1,420.09
Yellow Pine	0.35	8.35	0.0	8.70
White bark pine	0.86	9.48	1.56	11.90
Cottonwood	4.29	3.86	45.59	53.74
Alder	9.45	0.00	0.28	9.73
Maple	1.56	0.00	0.00	1.56
Birch	0.45	4.12	28.59	33.16
Aspen	0.52	14.46	212.70	227.68
Total Decid. plus pine	48.04	604.86	1,133.53	1,786.43
Total Volumes	3,092.94	1,798.61	4,351.59	9,243.14

Source: B.C. Ministry of Forests

Timber Harvests

The focus of this section is on the use of the forest resource. Figure 3 shows the volumes harvested in the Coast and Interior regions. Until 1972, the industry was dominated by industry activities on the Coast.

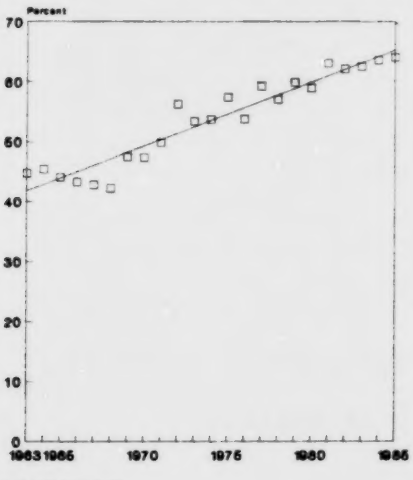
Figure 3
Timber Harvest
(Volumes in 000 000s M3)



Source: Statistics Canada

Figure 4 shows the percentage of the provincial harvest taken from the Interior. The graph was drawn as a trend line to illustrate that the Interior harvest is gaining in importance for the province.

Figure 4
Percent of Harvest from the Interior



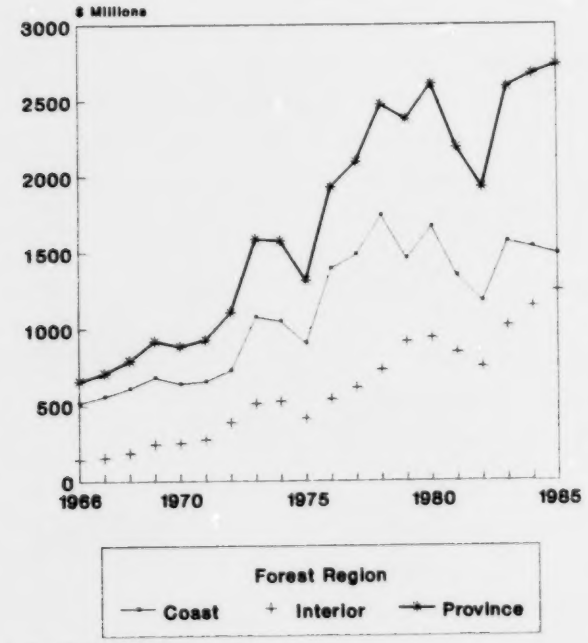
Source: Statistics Canada

The switch in the relative importance of the Coast and Interior regions came about with the introduction of closer utilization standards in the mid 1960s. The previous utilization standards were based on the recovery of lumber rather than fibre. The shift made residual fibre available for pulp production. At that time, the first pulp mills were established in the Interior and chips became a marketable by-product.

The trend can be expected to continue because the development opportunities tend to be in the Interior. There are still untapped fibre resources in the northeast and northwest portions of the province. There have been development proposals to use the deciduous supplies in the northeast, studies to look at development potentials in the northwest and assessments of the availability of residual fibres in the southeast.

While the volume of timber harvested in the Interior exceeds the volume harvested on the Coast, the value of the coastal harvest is still greater than the interior harvest. The timber on the Coast is larger and of better quality for lumber than Interior timber. Figure 5 shows the value of Coast and Interior harvests since 1966.

Figure 5
Value of Logging - Coast & Interior
(Millions of Dollars)

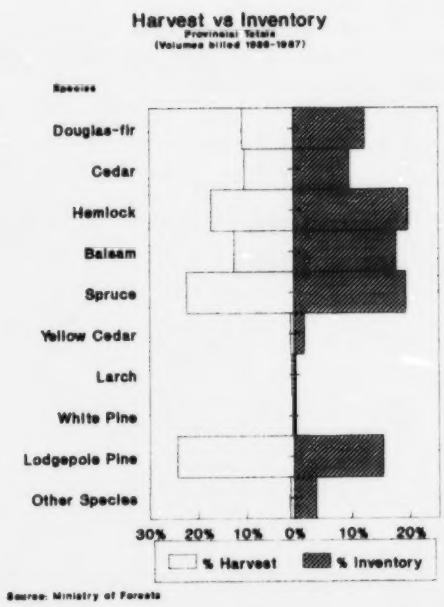


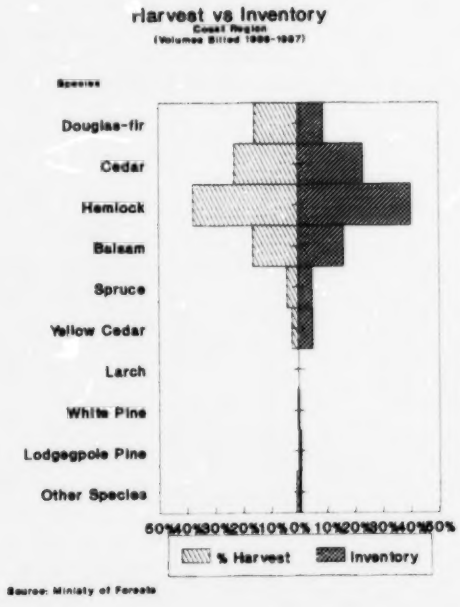
Source: Statistics Canada

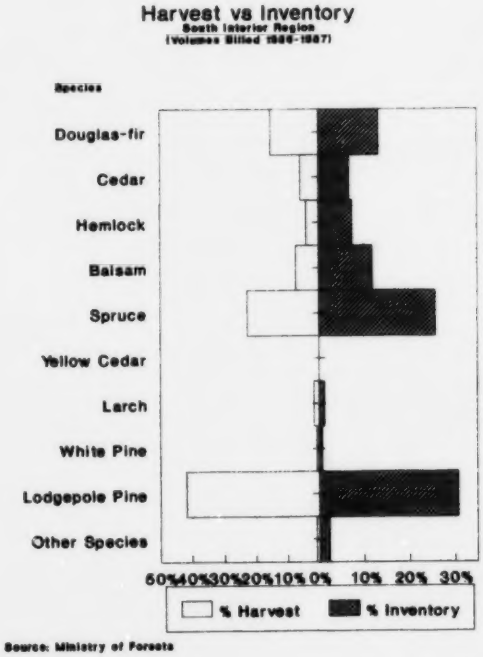
The harvest was examined in terms of the species cut as well as the total volumes. Figure 6 shows a series of paired graphs with one side being the portion of the harvest and the other side showing the portion of the inventory. These graphs compare the species profile of the harvest (Volumes Billed 1986-87) with the species profile of the inventory.

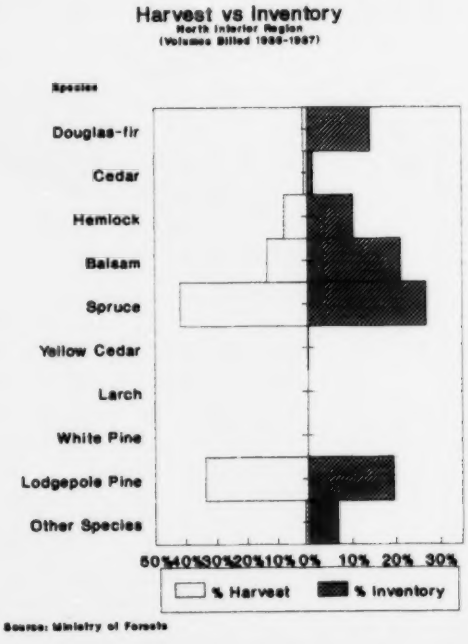
While the harvest is generally in tune with the inventory, there are some imbalances. The proportion of the harvest is greater than the inventory for preferred species and smaller for less desirable species. For example, although about four percent of the provincial inventory consists of deciduous species, they comprise a negligible amount of the harvest. On the Coast, Douglas-fir is a preferred species and yellow cedar is less desirable. In the South Interior, lodgepole pine and Douglas-fir are preferred, and balsam, hemlock and deciduous species are less desirable. In the North Interior, spruce and lodgepole pine are preferred, and balsam, hemlock, Douglas-fir and deciduous species are less desirable. Attempts are being made to encourage the harvest of deciduous species in the Peace River area of the province.

Figure 6 Comparison of the Species Profile of the Harvest with the Inventory





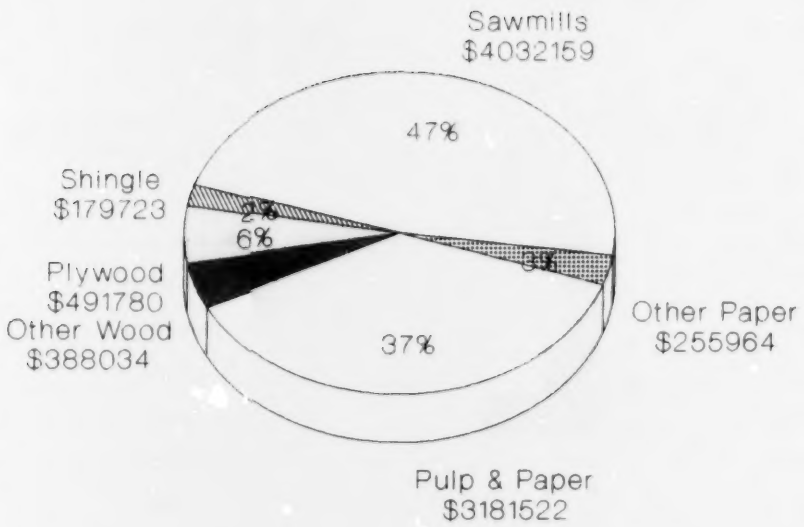




The forest industry in the province is based on lumber production with the use of residual chips in the pulp and paper industry. Figure 7 shows the value of shipments of all manufacturing industries based on the use of wood in the province in 1985. Lumber, and pulp and paper accounted for 84 percent of the total value of all products produced from timber.

Figure 7 Value of Shipments Wood-Based Industries - 1985

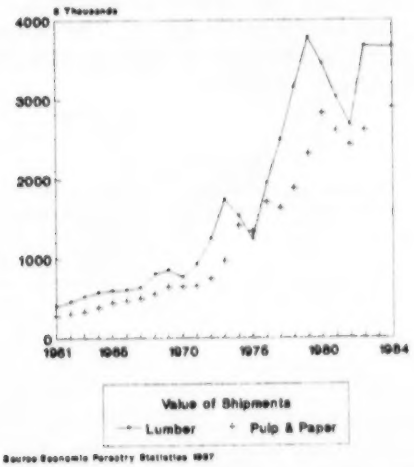
(000s Dollars)



Source: Statistics Canada

Figure 8 shows the value of shipments for the lumber, and pulp and paper industries since 1963.

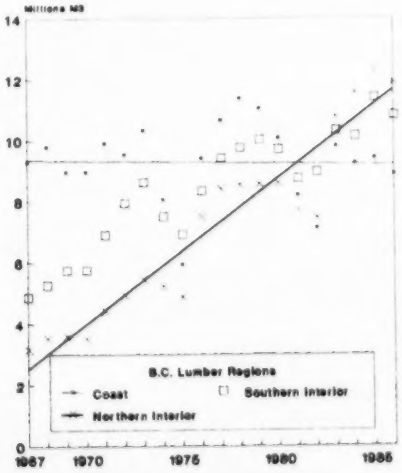
Figure 8 Value of Shipments
Lumber, Pulp and Paper
(Thousands of Dollars)



Source Economic Forestry Statistics 1987

Figure 9 shows lumber production for each of the three regions in the province since 1963. These graphs were drawn as trend lines. It is obvious that the greatest increases in lumber production have occurred in the North Interior region. The South Interior has also shown some significant increases while the Coast region has declined somewhat.

Figure 9 Lumber Production by Region
(Volumes in 000 000s m3)



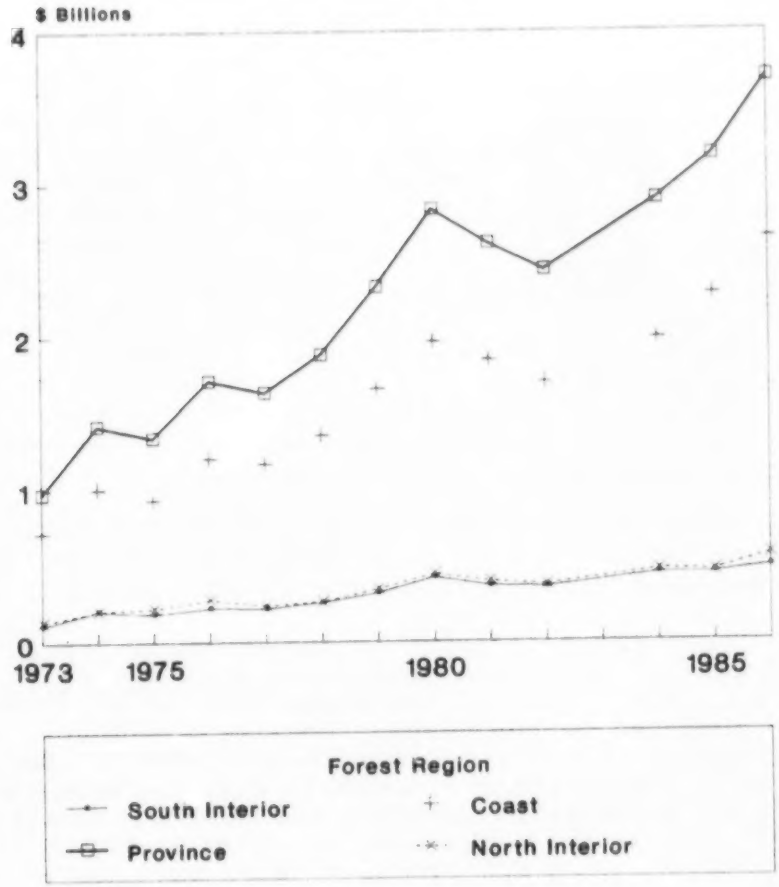
Source: Statistics Canada 99-005

The Coast and Interior lumber industries are quite different. The Coast industry is much older and relies on a high cost wood supply. It has survived by filling custom orders with high quality lumber. The Interior industry was developed on maximum through put to produce high volumes of low valued product. The chief possibility for further processing of solid wood products depends largely on the ability of Interior sawmills to segregate the species to extract maximum value from their products rather than maximum volume. The Coast industry will continue to produce more specialty grades with the continued emphasis on filling custom orders.

Figure 10 shows the value of shipments of own manufacture in the pulp and paper industry. Throughout the period for which statistics are available, the Coast production has dominated the industry and the proportion of the production from the coast has remained relatively constant. In this same period, the volume of timber harvested and the lumber produced in the Interior regions have risen dramatically. Since pulp is produced from residual chips, it can increase in proportion to the increase in lumber production. In the Interior, only the mill at Castlegar has the capability of whole log chipping but that facility hasn't been used for many years.

Figure 10

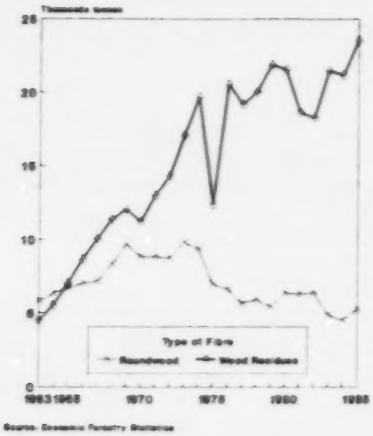
Pulp and Paper Production by Region
Value of Shipments in $ 000 000 000s



Source: Statistics Canada

The dependence of the pulp industry on residual chips is shown in Figure 11. The use of chips has been steadily increasing while the use of pulplogs has continually declined. At present, about 82 percent of the fibre supply is residual chips.

Figure 11 Source of Pulp Fibre

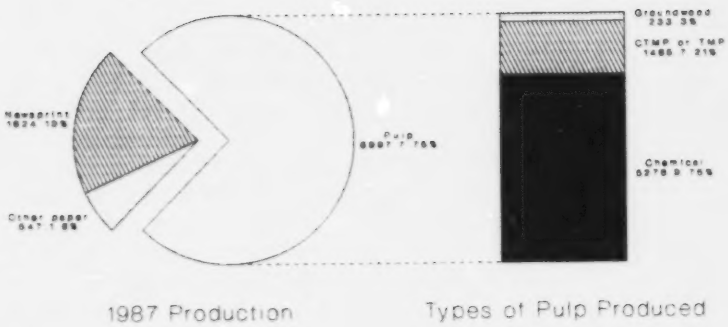


Further increases in the pulp industry can come from the increased fibre supply in the Interior. The industry is making application for developing mills within the northeast portion of the province. Louisiana-Pacific plans to build a CTMP mill which would require 452 000 m^3 of fibre from aspen and other deciduous species at Chetwynd and Fibreco proposes a CTMP mill which requires about 500 000 m^3 of fibre. A further 400 000 m^3 of timber was made available in the Sustat block of the Prince George TSA. There are further opportunities to use residual chips in other areas of the Interior as well.

On the Coast, Makin plans a CTMP mill at Britannia Beach which will use 220 000 m^3 of aspen. There is also an opportunity to use the decadent cedar-hemlock stands more fully.

The pulp and paper industry is dominated by the production of pulp. Figure 12 shows the portion of pulp and paper production for 1987. Most of the paper that is produced in the province is produced on the Coast. Only Prince George Pulp and Paper uses some of its pulp to produce sack kraft. The Interior pulp mills suffer from their remoteness from markets which makes it difficult to break into the paper markets. The mills rely on the production of market pulp.

Figure 12
Pulp and Paper Production - 1987
(Thousands of tonnes)



1987 Production

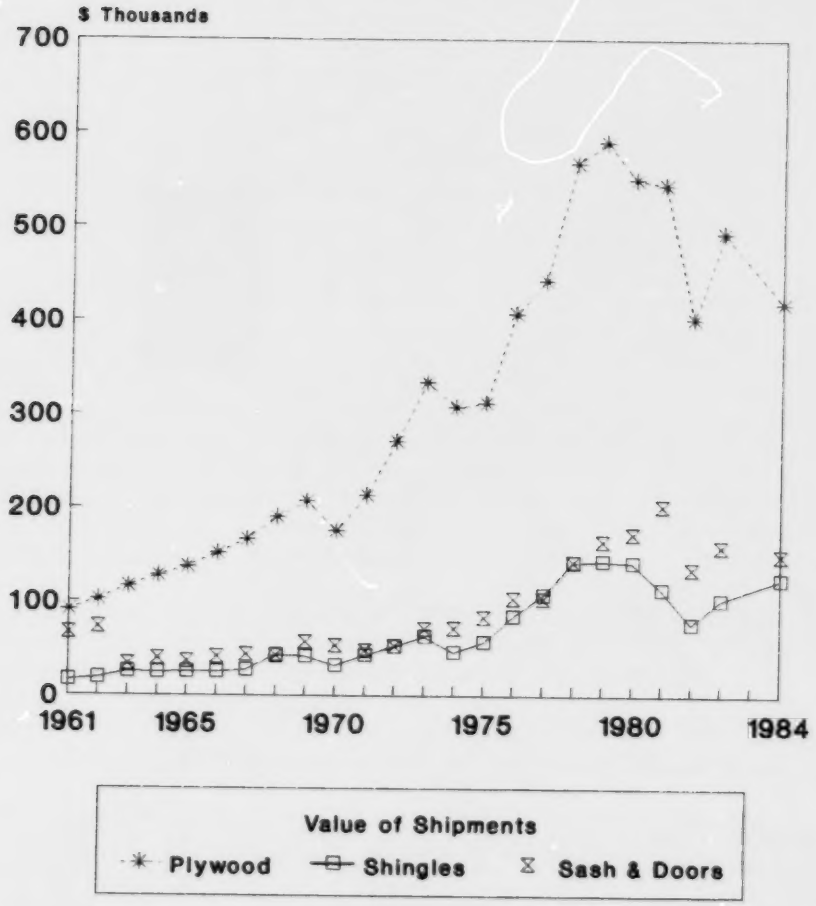
Types of Pulp Produced

Source: Ministry of Forests

Although lumber and pulp dominate, the B.C. forest industry produces a number of other products as well, including plywood and veneer, and shingles and shakes. A comparison of the value of these products is shown in figure 13. The value has not increased at the same rate as lumber and pulp. Since 1979, the value of plywood and veneer shipments has declined. There is a trend away from plywood as more reconstituted boards are being used in construction.

Figure 13 Value of Shipments Plywood, Shingles and Sash & Doors

(Thousands of Dollars)



Source:Economic Forestry Statistics 1987

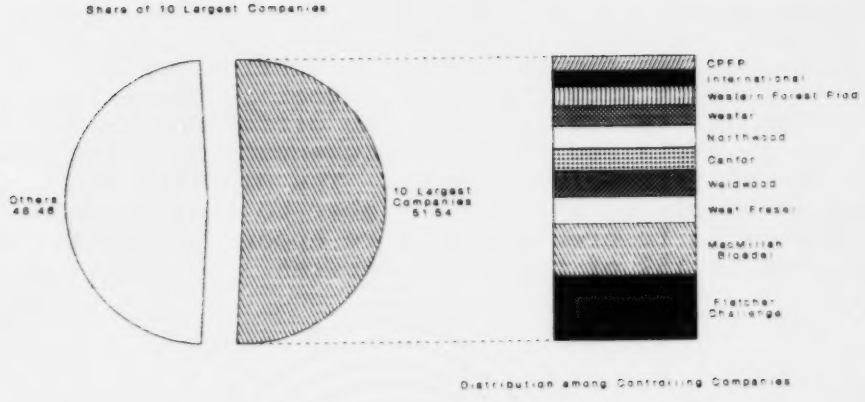
THE FOREST INDUSTRY

Although Commissioner Pearse noted the need for intermediate manufacturing, the growth of the forest industry has been in primary manufacturing. This issue was the subject of a number of studies for the 1984 Forest and Range Resource Analysis. These studies pointed out that although there are opportunities for expansion into secondary products, there are many problems to overcome. For example, on the Coast, there are problems of obsolete mills, high wood costs and use of marginal timber.

The recent recession, and changes in stumpage and silviculture policies are forcing the industry to reduce costs and achieve a greater return on timber harvested. It has begun to make changes by reducing staff and developing additional product lines. These are relatively new beginnings and the implications are not yet known. The limitations will be set more by capital than by timber supplies. The Coast industry will have to overcome the problem of obsolete mills.

Pearse was very concerned with the structure of the industry--control of the harvest in the hands of a few companies. He noted the growth in the portion of the harvest controlled by the 10 largest companies. In 1974, they controlled 58.7% of the committed harvesting rights. 1988 statistics provided by the Ministry of Forests show that the largest 10 companies controlled 51.54% of the harvesting rights. The difference in the two figures can be explained by the implementation of the Small Business Forest Enterprise Program. The Ministry of Forests has committed 7.02% of the available timber to that program. The current policy is to create even more opportunities for smaller operators--up to 15% of the total harvest.

Figure 14
Share of the Committed Harvest - 1988
Percent of the Total Apportionment



Source: Ministry of Forests

The importance of the forest industry is measured by the employment it generates. Figure 15 shows the employment in B.C. by industry sector. Although employment in all sectors changes with the business cycles, the greatest changes occur in the logging sector.

Figure 16 Employment by Sector

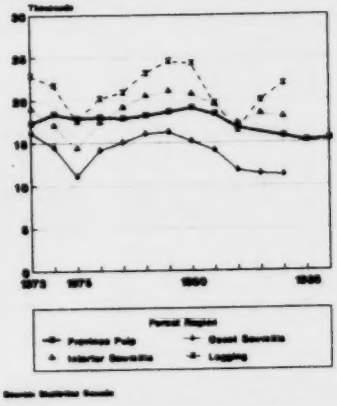
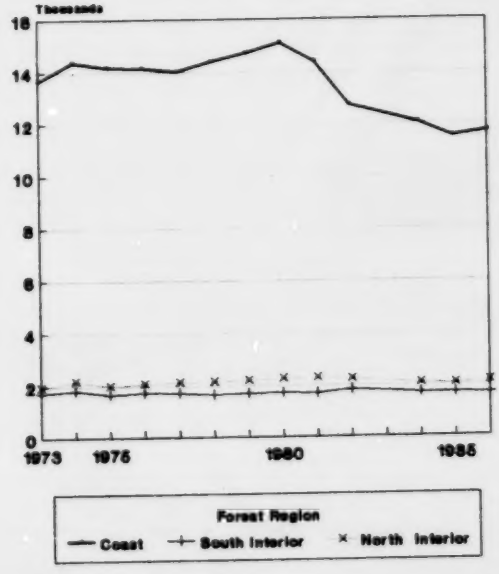


Figure 16 shows the employment in the coast and interior pulp mills. The two interior regions showed a more constant employment position than did the coast region.

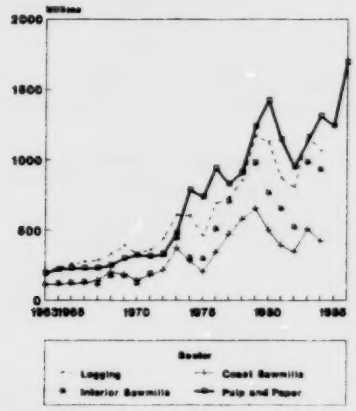
Figure 16 Employment by Region
Pulp and Paper Industry
Thousands of Employees in Total Activity



Source: Statistics Canada

A key indicator of the importance of an industry to the economy is the value added. This is value of the product minus the costs of materials and supplies used to produce it. Figure 17 shows the value added by sector for the main forest products.

Figure 17 Value Added by Sector

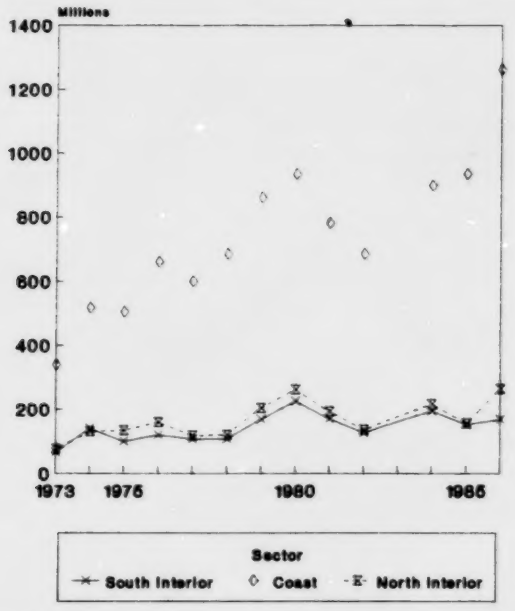


Source: Statistics Canada

Figure 18 shows the value added for the pulp and paper industry by region.

Figure 18 Value Added by Region

Value in $ 000 000s



Source: Statistics Canada

B.C. FORESTS AND SUSTAINABLE DEVELOPMENT

Current federal and provincial government forest policies are based on the concept of sustainable development, that is, on fostering resource development in an environmentally responsible manner. Although the concept is philosophically sound, it needs to be operationally defined. Canada and B.C. have an opportunity to be world leaders in developing this definition and in identifying its components, some of which might include:

- increasing forest productivity;
- encouraging fuller use of the resource;
- revising administrative procedures to help the industry become more competitive; and
- developing dispute resolution techniques to improve land use decisions, and make them more environmentally and socially responsible.

The current emphasis of FRDA is on increasing the productivity of the resource. Although this type of research needs to continue, it should be tied in with research on industrial and community development. There is a need to research new products and new markets, and their relationship to resource and environmental goals. Although the responsibility for developing and marketing products rests with the industry, governments can strive to provide a more flexible, responsive context in which the industry can operate. For example, they can help to research ways to overcome environmental problems, provide cooperative arrangements for breaking into new markets and provide management information systems for industry.

The Indian communities of B.C. require special attention. Present land claims have to be assessed in terms of their resource development potential and the implications of that development on both native groups and the industry.

In all regions of the province, the industry is moving into poorer quality stands at higher cost. The greatest potential for the development of new fibre resources occurs in the North Interior region. The use of this fibre will require more research to overcome silvicultural problems and to manufacture suitable products.

In order to remain competitive, the forest industry in B.C. must produce goods that yield higher returns. The Coast industry traditionally leads in making higher value-added products because of the better quality timber and access to markets, but even there, more needs to be accomplished. The goods that are

manufactured should rely on the species that comprise the inventory. That is, there should be a fuller use of the species profile--greater use of cedar on the Coast and deciduous in the North Interior. Further, there should be a fuller use of the residual fibre.

Overall, specific research activities under FRDA might include the following:

1. Develop a set of criteria to assess the practice of sustainable forestry.

2. Assess new markets and new products, especially among the Pacific Rim markets.

3. Expand management services to industry, e.g., mapping and information services.

4. Develop analytical tools and other mechanisms to help resolve land use conflicts.

5. Examine new techniques to support use of marginal fibres, e.g., problem forest types and residual fibres.

6. Study the relationships between resource industries and community development.

7. Assess the use of the forest resource by native groups.

8. Continue to research forest productivity and the means of enhancing that productivity.

BIBLIOGRAPHY

B.C. Ministry of Forests, 1984 Forest and Range Resource Analysis: Background Report Assessing the Outlook for British Columbia's Forest Industry. Victoria, 1984.

B.C. Ministry of Forests, 1984 Forest and Range Resource Analysis. Victoria: Strategic Studies Branch, Ministry of Forests, 1985.

B.C. Ministry of Forest and Lands, Ministry of Forests and Lands Annual Report 1986-87. Victoria: 1988.

B.C. Ministry of Forests, Major Primary Timber Processing Facilities in British Columbia - 1987. Victoria: Industry Development and Marketing Branch, August 1988.

B.C. Ministry of Forests, Forest and Range Resource Analysis Technical Report. Victoria, Information Services Branch, Ministry of Forests, 1980.

Canadian Forestry Service, Selected Forestry Statistics Canada 1987. Ottawa: Economics Branch, Information Report E-X-40, May 1988.

Canadian Forestry Service, Economic Forestry Statistics 1987. Victoria: Pacific Forestry Centre, Economics Report, 1987.

Council of Forest Industries of British Columbia, British Columbia Forest Industry Fact Book - 1988. Vancouver: COFI, 1988.

F.L.C. Reed and Associates Ltd., Selected Forest Industry Statistics of Britlish Columbia. Vancouver: F.L.C. Reed & Associates Ltd., Revision No. 1, June 1975.

Pearse, Peter H., Commissioner, Timber Rights and Forest Policy in British Columbia: Report of the Royal Commission on Forest Resources. Victoria: 1976.

Sloan, Gordon M^{c}G., Commissioner, The Forest Resources of British Columbia 1956: Report of the Commissioner. Victoria: Don M^{c}Diarmid, 1957.

Sloan, Gordon M^{c}G., Commissioner, The Forest REsources of British Columbia: Report of the Commissioner. Victoria: Charles F. Banfield, Printer, 1945.

Woodbridge, Reed and Associates Ltd., British Columbia's Forest Products Industry: Constraints to Growth. Vancouver: Ministry of State for Economic and Regional Development, 1984.

DETAILED STATISTICAL TABLES

FOREST LAND - 1975

	Coast (000s ha)	South Interior (000s ha)	North Interior (000s ha)	Total (000s ha)
Mature	5472.5	7103.7	13069.3	25,645.5
Immature	1964.2	8071.0	11443.3	21,478.5
NSR	343.5	652.1	1691.3	2,686.9
Non-Commercial	115.4	255.6	1605.3	1,976.3
Residual	10.6	255.6	38.2	304.4
Totals	7,906.2	16,338.0	27,847.4	52,091.6

Source: Pearse, Peter H., Timber Rights and Forest Policy in British Columbia. Victoria, 1976.

FOREST LAND - 1955

	Coast		Interior		Total
	(000s acres)	(000s ha)	(000s acres)	(000s ha)	(000s ha)
Mature	7880	3,188.2	14776	5,978.4	9,166.60
Immature	1253	507.0	31062	12,567.7	13,074.70
NSR	918	371.4	19134	7,741.6	8,113.00
Total	10,051.0	4,066.6	64,972.0	26,287.7	30,354.30

Source: Sloan, Gordon M°G., The Forest Resources of British Columbia 1956. Victoria, 1957.

Conversion Factor: 1 acre = 0.4047 ha

FOREST LAND IN B.C. - 1988
(000s of ha)

	COAST REGION			SOUTH INTERIOR REGION				NORTH INTERIOR REGION		
	Vancouver	Pr. Rup	Coast	Nelson	Kamloops	Cariboo	S. Int.	Pr. Geo.	P. R. Int	N. Int.
Immature										
unalienated	1019.27	42.08	1,061.35	1786.02	1667.14	2124.93	5,578.09	5686.01	2006.84	7,692.85
Parks	678.30	0.0	678.30	335.74	214.40	101.72	651.86	177.72	176.37	354.09
Alienated	507.47	5.74	513.21	355.99	238.28	87.94	682.21	325.89	81.64	407.53
Total	2,205.04	47.82	2,252.86	2,477.75	2,119.82	2,314.59	6,912.16	6,189.62	2,264.85	8,454.47
Mature										
Unalienated	2354.05	658.92	3,012.97	1129.59	2333.10	3599.81	7,062.50	9494.05	5285.89	14,779.94
Parks	1609.00	112.12	1,721.12	341.38	369.27	199.27	909.92	337.05	773.56	1,110.61
Alienated	365.61	32.73	398.34	150.26	83.19	97.38	330.83	190.12	43.70	233.82
Total	4,328.66	803.77	5,132.43	1,621.23	2,785.56	3,896.46	8,303.25	10,021.22	6,103.15	16,124.37
Resid.										
Unalienated	.74	.07	0.81	11.29	38.43	35.19	84.91	13.54	2.70	16.24
Parks	.09	0.0	0.09	.26	1.51	.46	2.23	4.35	.02	4.37
Alienated	.96	.04	1.00	36.96	13.19	13.58	63.73	1.05	.40	1.45
Total	1.79	0.11	1.90	48.51	53.13	49.23	150.87	18.94	3.12	22.06
NSR/DSD										
Unalienated	79.39	8.99	88.38	133.84	159.41	147.74	440.99	887.82	539.05	1,426.87
Parks	72.12	5.14	77.26	46.96	37.93	.60	85.49	25.16	98.64	123.80
alienated	91.78	1.83	93.61	33.02	18.57	9.35	60.94	30.92	4.09	35.01
Total	243.29	15.96	259.25	213.82	215.91	157.69	587.42	943.90	641.78	1,585.68
N.C.										
Unalienated	9.70	2.42	12.12	33.01	19.84	10.97	63.82	1197.05	153.72	1,350.77
Parks	98.27	109.97	208.24	2.53	24.70	93.04	120.27	8.53	57.48	66.01
Alienated	40.14	2.46	42.60	44.70	4.17	1.55	50.42	583.55	5.88	589.43
Total	148.11	114.85	262.96	80.24	48.71	105.56	234.51	1,789.13	217.08	2,006.21
Total Forest	6,926.89	982.51	7,909.40	4,441.55	5,223.13	6,523.53	16,188.21	18,962.81	9,229.98	28,192.79
Non Forest Land										
Unalienated	3837.29	1070.90	4,908.19	2351.73	1424.69	1670.67	5,447.09	11185.01	12321.14	23,506.15
Parks	1587.95	280.63	1,868.58	981.63	333.11	306.94	1,621.68	509.95	2839.09	3,349.04
Alienated	343.98	13.05	357.03	463.19	469.98	296.60	1,229.77	113.18	75.94	189.12
Total	5769.21	1364.58	7,133.79	3796.55	2227.79	2274.20	8,298.54	12278.52	15236.17	27,514.69
Total Area	12,696.10	2,347.09	15,043.19	8,238.10	7,450.92	8,797.73	24,486.75	31,241.33	24,466.15	55,707.48

Notes: Calculations used in the table.

Prince Rupert Coast Region = Coast Totals - Vancouver Region
South Interior Region = Nelson Region + Kamloops Region + Cariboo Region
Prince Rupert Interior Region = Prince Rupert Region - Prince Rupert Coast Region
North Interior Region = Prince George Region + Prince Rupert Interior Region

Data may not correspond to other published data due to rounding errors.

SOURCE: Inventory Branch, B.C. Ministry of Forests

Provincial Volumes - All Tenures - 1988
(Millions of m^3)

	Coast[1]	South Interior	North Interior	Total
Douglas-fir	276.20	238.76	22.02	536.98
Cedar	715.85	122.82	50.01	888.68
Hemlock	1244.36	132.64	451.09	1,828.09
Balsam	497.35	213.95	918.65	1,629.95
Spruce	152.41	463.40	1172.08	1,787.89
Yellow Cedar	158.73	0.19	5.11	164.03
Larch	0.0	21.99	1.25	23.24
Total Conif. excl. Pine	3,044.90	1,193.75	2,620.21	6,858.86
White Pine	7.06	12.56	0.25	19.87
Lodgepole pine	23.50	552.03	844.56	1,420.09
Yellow Pine	0.03	8.35	0.0	8.38
White bark pine	0.09	9.48	1.56	11.13
Cottonwood	4.29	3.86	45.59	53.74
Alder	9.45	0.00	0.28	9.73
Maple	1.56	0.00	0.00	1.56
Birch	0.45	4.12	28.59	33.16
Aspen	0.52	14.46	212.70	227.68
Total Decid. plus pine	46.95	604.86	1,133.53	1,785.34
Total Volumes	3,091.85	1,798.61	3,753.74	8,644.20

[1] Includes all of the Vancouver Forest Region

Source: Inventory Branch, Ministry of Forests

VOLUMES BY REGION - 1988
(millions of m^3)

	COAST REGION			SOUTH INTERIOR REGION				NORTH INTERIOR REGION		
	Vancouver	P.R. Coast	Coast	Nelson	Kamloops	Cariboo	S.Interior	Pr. Geo.	P.R. Int.	N. Int.
Douglas-fir	276.20	0.0	276.20	41.17	103.88	93.71	238.76	21.12	0.90	22.02
Cedar	623.89	91.96	715.85	50.88	52.72	19.22	122.82	26.24	23.77	50.01
Hemlock	1044.50	199.86	1,244.36	74.08	46.65	11.91	132.64	17.90	433.19	451.09
Balsam	438.23	59.12	497.35	78.00	86.34	49.61	213.95	403.26	515.39	918.65
Spruce	125.01	27.40	152.41	134.78	172.35	156.26	463.40	836.04	336.04	1,172.08
Yellow Cedar	143.79	14.94	158.73	0.0	0.01	0.18	0.19	0.0	5.11	5.11
Larch	0.0	0.0	0.00	17.73	4.26	0.0	21.99	1.22	0.03	1.25
Total Conif excl. pine	2,651.62	393.28	3,044.90	396.65	466.21	330.89	1,193.75	1,305.78	1,314.43	2,620.21
White Pine	7.06	0.0	7.06	7.52	4.91	0.13	12.56	0.23	0.02	0.25
Lodgepole Pine	21.51	1.99	23.50	68.46	161.05	322.52	552.03	558.07	286.49	844.56
Yellow Pine	0.03	0.0	0.03	0.93	6.97	0.45	8.35	0.0	0.0	0.00
White bark pine	.09	0.0	0.09	4.17	3.20	2.11	9.48	0.62	0.94	1.56
Cottonwood	1.96	2.33	4.29	0.96	1.12	1.60	3.68	31.69	13.90	45.59
Alder	8.29	1.16	9.45	0.0	0.0	0.0	0.00	0.0	0.28	0.28
Maple	1.56	0.0	1.56	0.0	0.0	0.0	0.00	0.0	0.0	0.00
Birch	0.34	0.11	0.45	0.63	1.63	1.86	4.12	25.59	3.00	28.59
Aspen	0.25	0.27	0.52	0.73	3.10	10.63	14.46	187.39	25.31	212.70
Total Decid. plus pine	41.09	5.86	46.95	83.40	181.98	339.30	604.68	803.59	329.94	1,133.53
Total Volumes	2,692.71	399.14	3,091.85	480.05	648.19	670.19	1,798.43	2,109.37	1,644.37	3,753.74

Notes: Calculations of Regional Volumes.

Prince Rupert Coast Region = Coast Total - Vancouver Region
South Interior Region = Nelson Region + Kamposps Region + Cariboo Region
Prince Rupert Interior Region = Prince Rupert Region - Prince Rupert Coast Region
North Interior Region = Prince George Region + Prince Rupert Interior Region

Source: Inventory Branch, Ministry of Forests

PROVINCE OF BRITISH COLUMBIA
COAST TOTAL

NET VOLUME IN 100s OF CUBIC METRES OF MATURE CONIFEROUS SPECIES OTHER THAN PINES, 17.5 cm +, CD to 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES							
	DOUGLAS FIR	WESTERN RED CEDAR	HEMLOCK	BALSAM	SPRUCE	YELLOW CEDAR	LARCH	TOTAL CONIFER EXCL. PINES
APPROVED TSA UNITS	923 620	4 029 046	6 285 070	2 641 673	994 756	990 910	0	15 865 075
UNREGULATED UNITS	15 447	26 925	53 341	23 841	7 880	1 106	0	128 440
CROWN LAND UNRESERVED	5 587	526	2 250	1 239	37	34	0	9,673
CROWN LAND WITHIN PROV. PARKS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	944 654	4 056 497	6 340 661	2 666 753	1 002 673	991 950	0	16 003 188
MAJOR PROVINCIAL PARKS	168 063	97 883	288 384	147 050	12 958	12 701	0	727 039
RESERVES AND MINOR PARKS	29 645	32 944	54 599	35 139	9 137	8 650	0	170 114
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	339 694	1 672 052	3 307 780	1 313 641	299 487	423 076	0	7 355 730
VANC. WATER DIST., UBC RESEARCH FOREST	47 983	103 951	95 840	43 463	1 343	21 154	0	313 734
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	241 284	803 330	1 509 531	553 482	127 110	100 330	0	3 335 067
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	826 669	2 710 160	5 256 134	2 092 775	450 035	565 911	0	11 901 684
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	968 831	339 184	787 122	200 802	51 568	23 492	0	2 370 999
CROWN GRANTS LOCAL ADMINISTRATION	1 176	616	1 282	36	208	74	0	3 392
NATIONAL PARKS	606	9 944	8 753	2 551	648	294	0	22 796
INDIAN RESERVES	8 544	36 690	43 387	8 883	15 997	5 242	0	118 743
FEDERAL ADMINISTRATION OTHERS	6 919	5 435	6 299	1 629	2 974	358	0	23 677
TOTAL: ALIENATED LAND	986 076	391 869	846 843	213 964	71 395	29 460	0	2 539 607
COAST TOTAL	2 757 399	7 158 526	12 443 638	4 973 492	1 524 103	1 587 321	0	30 444 479

PROVINCE OF BRITISH COLUMBIA
COAST TOTAL

NET VOLUME IN 100s OF CUBIC METRES OF MATURE PINES AND DECIDUOUS SPECIES, 17.5 cm+, CD TO 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES										
	W. WHITE PINE	LODGEPOLE PINE	YELLOW PINE	WHITE BARK PINE	COTTON WOOD	RED ALDER	BROAD LEAF MAPLE	BIRCH	ASPEN	TOTAL DECID. PLUS PINE	TOTAL CONIF. DECIDUOUS PINES
APPROVED TSA UNITS	27 016	209 575	220	352	20 666	34 165	2 890	2 632	3 125	300 641	16 165 716
UNREGULATED UNITS	187	70	0	0	106	306	62	11	0	742	129,182
CROWN LAND UNRESERVED	46	10	0	0	0	12	7	3	0	78	9 751
CROWN LAND WITHIN PROV. PARKS	0	0	0	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	27 249	209 655	220	352	20 772	34 483	2 959	2 646	3 125	301 461	16 304 649
MAJOR PROVINCIAL PARKS	3 536	2 095	0	0	222	1 321	297	315	13	7 799	734 838
RESERVES AND MINOR PARKS	1 026	1 595	0	0	349	336	47	73	0	3 426	173 540
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	13 962	7 668	0	0	4 142	8 987	4,211	134	1 190	40 294	7 396 024
VANC. WATER DIST., UBC RESEARCH FOREST	357	2	0	0	63	77	53	0	0	552	314,286
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	8 125	5 191	0	7	7 523	2 649	341	120	53	24 009	3,359 076
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	27 006	16 551	0	7	12 299	13 370	4,949	642	1 256	76,080	11 977 764
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	14 309	5 489	89	0	3 981	45 222	6 691	1 009	228	77 018	2 448 017
CROWN GRANTS LOCAL ADMINISTRATION	44	17	0	0	51	260	302	14	0	688	4 080
NATIONAL PARKS	76	119	0	0	0	27	2	0	0	224	23 020
INDIAN RESERVES	140	3 046	13	0	5 350	878	556	167	570	10 720	129 463
FEDERAL ADMINISTRATION OTHERS	44	157	0	0	406	255	95	21	6	984	24 661
TOTAL: ALIENATED LAND	14 613	8 828	102	0	8 788	46 642	7 646	1 211	804	89 634	2 629 241
COAST TOTAL	68 868	235 034	322	359	42 859	94 495	15 554	4 499	5 185	467 175	30 911 654

PROVINCE OF BRITISH COLUMBIA
INTERIOR ONLY

FOREST AND NON-FOREST AREA IN HECTARES

STATUS	FOREST LAND					TOTAL	NON FOREST LAND	TOTAL AREA
	IMMATURE	MATURE	RESID.	NSR/DSD	N.C.			
APPROVED TSA UNITS	13 252 565	21 803 427	101 154	1 866 972	1 414 360	38 438 478	28 870 765	67 309 243
UNREGULATED UNITS	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	1 323	21 075	0	727	88	23 213	37 982	61 195
CROWN LAND WITHIN PROV. PARKS	17 131	17 929	0	158	137	35 355	44 491	79 846
Total: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	13 271 019	21 842 431	101 154	1 867 857	1 414 585	38 497 046	28 953 238	67 450 284
MAJOR PROVINCIAL PARKS	319 672	928 819	193	45 340	176 116	1 470 140	2 432 309	3 902 449
RESERVES AND MINOR PARKS	63 247	79 737	804	3 314	2 850	149 952	235 372	385 324
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	504 134	892 398	4 956	147 344	5 105	1 553 937	2 263 012	3 816 949
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	130 477	119 498	655	13 288	2 194	266 112	39 941	306 053
ACTIVE LEASES AND PERMITS	273	79	0	0	0	352	92	444
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	1 017 803	2 020 531	6 608	209 286	186 265	3 440 493	4 970 726	8 411 219
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	907 177	420 871	62 415	84 590	127 072	1 602 125	1 452 434	3 054 559
CROWN GRANTS LOCAL ADMINISTRATION	6 662	590	24	287	246	7 809	28 618	36 427
NATIONAL PARKS	72 273	57 206	24	3 438	36 281	169 222	262 116	431 338
INDIAN RESERVES	84 591	48 502	2 654	6 704	5 083	147 534	127 900	275 434
FEDERAL ADMINISTRATION OTHERS	19 036	37 479	54	916	784	58 269	18 192	76 461
TOTAL: ALIENATED LAND	1 089 739	564 648	65 171	95 935	169 466	1 984 959	1 889 260	3 874 219
INTERIOR TOTAL	15 378 561	24 427 610	172 933	2 173 078	1 770 316	43 922 498	35 813 224	79 735 722

PROVINCE OF BRITISH COLUMBIA
COAST ONLY
FOREST AND NON FOREST AREA IN HECTARES

STATUS	FOREST LAND					TOTAL	NON FOREST LAND	TOTAL AREA
	IMMATURE	MATURE	RESID.	NSR/DSD	N.C.			
APPROVED TSA UNITS	990 939	2 993 585	807	82 753	5 053	4 073 137	4 862 350	8 935 487
UNREGULATED UNITS	67 325	17 921	0	5 216	6 648	97 110	34 652	131 762
CROWN LAND UNRESERVED	3 089	1 466	0	408	415	5 378	11 181	16 559
CROWN LAND WITHIN PROV. PARKS	0	0	0	0	0	0	0	0
Total: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	1 061 353	3 012 972	807	88 377	12 116	4 175 625	4 908 183	9 083 808
MAJOR PROVINCIAL PARKS	39 970	113, 618	13	11 349	5 124	170 074	409 200	579 274
RESERVES AND MINOR PARKS	22 582	31 607	67	783	170	55 209	21 381	76 590
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	428 664	1 115 337	0	29 418	184 886	1 758 305	1 381 973	3 140 278
VANC. WATER DIST., UBC RESEARCH FOREST	8 856	25 333	0	168	110	34 467	21 457	55 924
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	166 376	435 229	5	35 546	17 949	655 105	34 570	689 675
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	666 448	1 721 124	85	77 264	208 239	2 673 160	1 868 581	4 541 741
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	476 512	355 010	840	88 629	40 304	961 295	309 490	1 270 785
CROWN GRANTS LOCAL ADMINISTRATION	9 545	4 295	0	156	151	14 147	19 282	33 429
NATIONAL PARKS	225	8 213	0	717	38	9 193	6 231	15 424
INDIAN RESERVES	18 980	26 934	163	2 297	990	49 364	16 905	66 269
FEDERAL ADMINISTRATION OTHERS	7 953	3 886	0	1 810	1 118	14 767	5 117	19 884
TOTAL: ALIENATED LAND	513 215	398 338	1 003	93 609	42 601	1 048 766	357 025	1 405 791
COAST TOTAL	2 241 016	5 132 434	1 895	259 250	262 956	7 897 551	7 133 789	15 031 340

PROVINCE OF BRITISH COLUMBIA
INTERIOR TOTAL

NET VOLUME IN 100s OF CUBIC METRES OF MATURE CONIFEROUS SPECIES OTHER THAN PINES, 17.5 cm +, CD to 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES							
	DOUGLAS FIR	WESTERN RED CEDAR	HEMLOCK	BALSAM	SPRUCE	YELLOW CEDAR	LARCH	TOTAL CONIFER EXCL. PINES
APPROVED TSA UNITS	2 216 713	1 148 714	3 712 866	9 367 622	14 411 954	208	187,852	31 045,929
UNREGULATED UNITS	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	45	771	1 808	21 625	24 312	0	0	48,561
CROWN LAND WITHIN PROV. PARKS	3,798	2 657	4 373	6,517	14,079	0	605	32,029
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	2 220 556	1 152 142	3 719,047	9 395 764	14 450 345	208	188.457	31 126 519
MAJOR PROVINCIAL PARKS	70 606	106 405	119,152	331 523	874,342	2 015	2 951	1 506 994
RESERVES AND MINOR PARKS	18 777	10 789	10,163	42 187	68 723	0	929	151,568
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	119 565	312 745	1 785 833	1 446 333	631 560	49 860	23 908	4 369 804
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	35 916	59 384	88 284	36 114	86 747	50	1 568	308 063
ACTIVE LEASES AND PERMITS	46	0	0	13	6	0	0	65
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	244 910	489 323	2 003 432	1 856 170	1 661 378	51 925	29.356	6 336 494
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	83 837	52 344	62 727	50 834	156 757	2	11,714	418 215
CROWN GRANTS LOCAL ADMINISTRATION	119	12	56	34	55	0	11	287
NATIONAL PARKS	11 409	33 141	47 929	17 716	63 501	793	2,509	176 998
INDIAN RESERVES	22 899	1 257	3 853	3 303	14 545	5	124	45 986
FEDERAL ADMINISTRATION OTHERS	28 659	48	231	2 211	8 104	0	203	39 456
TOTAL: ALIENATED LAND	146 923	86 802	114 796	74 098	242 962	800	14.561	680 942
PROVINCIAL TOTAL	2 612 389	1 728 267	5 837 275	11 326 032	16 354 685	52 933	232.374	38.143.955

PROVINCE OF BRITISH COLUMBIA
INTERIOR TOTAL

NET VOLUME IN 100s OF CUBIC METRES OF MATURE PINES AND DECIDUOUS SPECIES, 17.5 cm+, CD TO 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES										
	W. WHITE PINE	LODGEPOLE PINE	YELLOW PINE	WHITE BARK PINE	COTTON WOOD	RED ALDER	BROAD LEAF MAPLE	BIRCH	ASPEN	TOTAL DECID. PLUS PINE	TOTAL CONIF. DECIDUOUS PINES
APPROVED TSA UNITS	83 045	12 782 302	68 043	97 919	405 793	1 046	0	292 427	2 025 421	15 755 996	46 801 925
UNREGULATED UNITS	0	0	0	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	0	556	0	0	29	0	0	15	7	607	49 168
CROWN LAND WITHIN PROV. PARKS	513	13 427	20	53	30	0	0	67	70	14 180	46 209
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	83 558	12 796 285	68 063	97 972	405 852	1 046	0	292 509	2 025 498	15 770 783	46 897 302
MAJOR PROVINCIAL PARKS	8 582	541,871	1,241	2,787	9,060	97	0	8,051	30,246	601,935	2,108,929
RESERVES AND MINOR PARKS	780	44,061	197	1,114	1,924	0	0	934	8,465	57,475	209,043
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	22 695	256,128	2,726	4,227	34,889	1,311	0	8,804	12,163	342,943	4,712,747
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	5 133	78,771	413	132	2,845	37	0	2,589	8,202	98,122	406,185
ACTIVE LEASES AND PERMITS	0	11	0	0	1	0	0	1	0	13	78
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	37 190	920 842	4 577	8 260	48 719	1 445	0	20 379	59 076	1 100 488	7 436 982
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	5 189	189 662	5 844	4 077	34 167	57	0	12 878	173 078	424 952	843 167
CROWN GRANTS LOCAL ADMINISTRATION	4	121	80	0	14	0	0	30	273	522	809
NATIONAL PARKS	3 451	26 416	29	0	62	338	0	20	15	30 331	207 329
INDIAN RESERVES	23	15 796	4 878	31	3 202	37	0	1 084	12 290	37 341	83 327
FEDERAL ADMINISTRATION OTHERS	176	16 755	29	576	839	4	0	119	1 452	19 950	59 406
TOTAL: ALIENATED LAND	8 843	248 750	10 860	4 684	38 284	436	0	14 131	187 108	513 096	1 194 038
INTERIOR TOTAL	129 591	13 965 877	83 500	110 916	492 855	2 927	0	327 019	2 271 682	17 384 367	55 528 322

VANCOUVER FOREST REGION

FOREST AND NON-FOREST AREA IN HECTARES

STATUS	FOREST LAND					TOTAL	NON FOREST LAND	TOTAL AREA
	IMMATURE	MATURE	RESID.	NSR/DSD	N.C.			
APPROVED TSA UNITS	949,523	2,348 532	742	73,765	4,043	3,376,605	3,801,671	7,178,276
UNREGULATED UNITS	66,660	4,056	0	5,216	5,238	81,170	24,433	105,603
CROWN LAND UNRESERVED	3,089	1,466	0	408	415	5,378	11,181	16,559
CROWN LAND WITHIN PROV. PARKS	0	0	0	0	0	0	0	0
Total: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	1,019 272	2,354,054	742	79,389	9,696	3,463,153	3,837,285	7,300,438
MAJOR PROVINCIAL PARKS	64,275	135,088	13	13,966	8,586	221,928	427,139	649,067
RESERVES AND MINOR PARKS	22,480	20,311	67	777	170	43,805	16,708	60,513
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	418,144	1,029,514	0	26,286	83,748	1,557,692	1,090,584	2,648,276
VANC. WATER DIST., UBC RESEARCH FOREST	8,856	25,333	0	168	110	34,467	21,457	55,924
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	164,549	398,755	5	30,927	5,658	599,894	32,063	631,957
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	678,304	1,609 001	85	72,124	98,272	2,457,786	1,587,951	4,045,737
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	473,683	342,728	814	87,305	38,369	942,899	304,377	1,247,276
CROWN GRANTS LOCAL ADMINISTRATION	8,739	800	0	148	151	9,838	18,189	28,027
NATIONAL PARKS	225	8,213	0	717	38	9,193	6,231	15,424
INDIAN RESERVES	17,041	11,159	147	1,846	737	30,930	10,390	41,320
FEDERAL ADMINISTRATION OTHERS	7,786	2,707	0	1,761	845	13,099	4,791	17,890
TOTAL: ALIENATED LAND	507,474	365,607	961	91,777	40,140	1,005,959	343,978	1,349,937
REGIONAL TOTAL	2,205,050	4,328,662	1,788	243,290	148,108	6,926,898	5,769,214	12,696,112

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VANCOUVER FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE CONIFEROUS SPECIES OTHER THAN PINES, 17.5 cm +, CD to 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES							
	DOUGLAS FIR	WESTERN RED CEDAR	HEMLOCK	BALSAM	SPRUCE	YELLOW CEDAR	LARCH	TOTAL CONIFER EXCL. PINES
APPROVED TSA UNITS	923,620	3,231,516	4,762,534	2,188,099	747,837	856,261	0	12,709,867
UNREGULATED UNITS	15,167	1,854	5,063	1,167	123	87	0	23,461
CROWN LAND UNRESERVED	5,587	526	2,250	1,239	37	34	0	9,673
CROWN LAND WITHIN PROV. PARKS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	944,374	3,233,896	4,769,847	2,190,505	747,997	856,382	0	12,743,001
MAJOR PROVINCIAL PARKS	172,734	94,439	288,895	170,592	43,778	12,168	0	782,606
RESERVES AND MINOR PARKS	29,645	32,024	53,790	34,830	9,009	8,436	0	167,734
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	339,694	1,620,101	3,095,409	1,216,969	276,721	416,312	0	6,965,206
VANC. WATER DIST., UBC RESEARCH FOREST	47,983	103,951	95,840	43,463	1,343	21,154	0	313,734
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	241,273	782,724	1,353,396	526,442	113,657	98,373	0	3,115,865
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	831,329	2,633,239	4,887,330	1,992,296	444,508	556,443	0	11,345,145
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	968,021	323,923	746,437	191,356	44,014	21,837	0	2,295,588
CROWN GRANTS LOCAL ADMINISTRATION	1,176	616	1,282	36	208	74	0	3,392
NATIONAL PARKS	1,642	27,192	19,240	5,099	3,426	1,087	0	57,686
INDIAN RESERVES	8,544	16,949	18,068	2,859	8,316	1,814	0	56,550
FEDERAL ADMINISTRATION OTHERS	6,912	3,070	2,821	190	1,607	238	0	14,838
TOTAL: ALIENATED LAND	986,295	371,750	787,848	199,540	57,571	25,050	0	2,428,054
REGIONAL TOTAL	2,761,998	6,238,885	10,445,025	4,382,341	1,250,076	1,437,875	0	26,516,200

VANCOUVER FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE PINE AND BROAD LEAVED SPECIES, 17.5 cm+, CD TO 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES										
	W. WHITE PINE	LODGEPOLE PINE	YELLOW PINE	WHITE BARK PINE	COTTON WOOD	RED ALDER	BROAD LEAF MAPLE	BIRCH	ASPEN	TOTAL DECID. PLUS PINE	TOTAL CONIF. DECIDUOUS PINES
APPROVED TSA UNITS	27,016	183,605	220	352	13,297	23,117	2,890	1,795	1,180	253,472	12,963,339
UNREGULATED UNITS	187	42	0	0	0	231	62	10	0	532	23,993
CROWN LAND UNRESERVED	46	10	0	0	0	12	7	3	0	78	9,751
CROWN LAND WITHIN PROV. PARKS	0	0	0	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	27,249	183,657	220	352	13,297	23,360	2,959	1,808	1,180	254,082	12,997,083
MAJOR PROVINCIAL PARKS	4,806	10,977	25	467	164	1,268	297	329	71	18,404	801,010
RESERVES AND MINOR PARKS	1,026	1,559	0	0	349	324	47	73	0	3,378	171,112
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	13,962	7,665	0	0	885	8,957	4,211	9	1,176	36,865	7,002,071
VANC. WATER DIST., UBC RESEARCH FOREST	357	2	0	0	63	77	53	0	0	552	314,286
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	8,230	5,426	0	31	1,450	2,420	341	120	56	18,074	3,133,939
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	28,381	25,629	25	498	2,911	13,046	4,949	531	1,303	77,273	11,422,418
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	14,316	4,840	89	8	2,321	45,000	6,691	938	23	74,226	2,369,814
CROWN GRANTS LOCAL ADMINISTRATION	44	17	0	0	51	260	302	14	0	688	4,080
NATIONAL PARKS	426	220	0	0	13	365	2	0	0	1,026	58,712
INDIAN RESERVES	140	608	13	0	1,043	673	556	42	33	3,108	59,658
FEDERAL ADMINISTRATION OTHERS	44	94	0	0	13	199	95	19	0	464	15,302
TOTAL: ALIENATED LAND	14,970	5,779	102	8	3,441	46,497	7,646	1,013	56	79,512	2,507,566
REGIONAL TOTAL	70,600	215,065	347	858	19,649	82,903	15,554	3,352	2,539	410,867	26,927,067

PRINCE RUPERT FOREST REGION

FOREST AND NON-FOREST AREA IN HECTARES

STATUS	FOREST LAND					TOTAL	NON FOREST LAND	TOTAL AREA
	IMMATURE	MATURE	RESID.	NSR/DSD	N.C.			
APPROVED TSA UNITS	2,047,841	5,930,068	2,773	547,808	154,727	8,683,217	13,375,913	22,059,130
UNREGULATED UNITS	665	13,865	0	0	1,410	15,940	10,219	26,159
CROWN LAND UNRESERVED	35	0	0	232	0	267	11	278
CROWN LAND WITHIN PROV. PARKS	378	873	0	0	0	1,251	5,893	7,144
Total: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	2,048,919	5,944,806	2,773	548,040	156,137	8,700,675	13,392,036	22,092,711
MAJOR PROVINCIAL PARKS	90,771	400,734	22	9,684	53,188	554,399	1,326,429	1,880,828
RESERVES AND MINOR PARKS	583	16,843	0	66	175	17,667	56,830	74,497
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	81,060	426,612	0	89,287	101,776	698,735	1,733,126	2,431,861
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	3,953	41,494	0	4,740	12,307	62,494	3,338	65,832
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	176,367	885,683	22	103,777	167,446	1,333,295	3,119,723	4,453,018
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	73,110	49,019	420	5,235	6,779	134,563	75,107	209,670
CROWN GRANTS LOCAL ADMINISTRATION	820	3,591	0	12	0	4,423	1,218	5,641
NATIONAL PARKS	0	0	0	0	0	0	0	0
INDIAN RESERVES	12,497	22,265	16	619	1,263	36,660	11,618	48,278
FEDERAL ADMINISTRATION OTHERS	956	1,553	0	49	293	2,851	1,044	3,895
TOTAL: ALIENATED LAND	87,383	76,428	436	5,915	8,335	178,497	88,987	267,484
REGIONAL TOTAL	2,312,669	6,906,917	3,231	657,732	331,918	10,212,467	16,600,746	26,813,213

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PRINCE RUPERT FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE CONIFEROUS SPECIES OTHER THAN PINES, 17.5 cm +, CD to 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES							
	DOUGLAS FIR	WESTERN RED CEDAR	HEMLOCK	BALSAM	SPRUCE	YELLOW CEDAR	LARCH	TOTAL CONIFER EXCL. PINES
APPROVED TSA UNITS	1,243	877,915	4,240,139	4,351,630	2,986,188	134,742	285	12,592,142
UNREGULATED UNITS	280	25,071	48,278	22,674	7,757	919	0	104,979
CROWN LAND UNRESERVED	0	0	0	0	0	0	0	0
CROWN LAND WITHIN PROV. PARKS	0	0	0	289	337	0	0	626
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	1,523	902,986	4,288,417	4,374,593	2,994,282	135,661	285	12,697,747
MAJOR PROVINCIAL PARKS	3,866	7,517	33,695	119,718	325,833	829	0	491,458
RESERVES AND MINOR PARKS	0	926	5,434	11,926	4,803	214	0	23,303
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	2,711	182,853	1,749,156	1,179,945	246,136	56,624	0	3,417,425
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	68	21,781	170,423	33,911	18,317	1,978	0	246,478
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	6,645	213,077	1,958,708	1,345,500	595,089	59,645	0	4,178,664
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	866	18,273	50,582	15,322	30,743	1,656	0	117,442
CROWN GRANTS LOCAL ADMINISTRATION	0	0	0	1	10	0	0	11
NATIONAL PARKS	0	0	0	0	0	0	0	0
INDIAN RESERVES	1	20,583	29,123	8,126	12,350	3,433	0	73,616
FEDERAL ADMINISTRATION OTHERS	8	2,368	3,666	1 559	1,898	120	0	9,619
TOTAL: ALIENATED LAND	875	41,224	83,371	25,008	45,001	5,209	0	200,688
REGIONAL TOTAL	9,043	1,157,287	6,330,496	5,745,101	3,634,372	200,515	285	17,077,099

PRINCE RUPERT FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE PINE AND BROAD LEAVED SPECIES, 17.5 cm+, CD TO 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES										
	W. WHITE PINE	LODGEPOLE PINE	YELLOW PINE	WHITE BARK PINE	COTTON WOOD	RED ALDER	BROAD LEAF MAPLE	BIRCH	ASPEN	TOTAL DECID. PLUS PINE	TOTAL CONIF. DECIDUOUS PINES
APPROVED TSA UNITS	0	2,459,747	0	9,143	103,603	12,094	0	23,441	215,388	2,823,416	15,415,558
UNREGULATED UNITS	0	28	0	0	106	75	0	1	0	210	105,189
CROWN LAND UNRESERVED	0	0	0	0	0	0	0	0	0	0	0
CROWN LAND WITHIN PROV. PARKS	0	289	0	0	0	0	0	0	4	293	919
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	0	2,460,064	0	9,143	103,709	12,169	0	23,442	215,392	2,823,919	15,521,666
MAJOR PROVINCIAL PARKS	18	294,898	0	0	3,941	76	0	3,441	16,173	318,547	810,005
RESERVES AND MINOR PARKS	0	4,862	0	243	523	12	0	86	1,868	7,594	30,897
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	0	93,419	0	0	34,736	1,341	0	2,482	6,766	138,744	3,556,169
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	0	386	0	0	6,294	254	0	13	36	6,983	253,461
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	18	393,565	0	243	45,494	1,683	0	6,022	24,843	471,868	4,650,532
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	1	26,137	0	0	7,343	278	0	1,295	12,470	47,524	164,966
CROWN GRANTS LOCAL ADMINISTRATION	0	4	0	0	0	0	0	0	0	4	15
NATIONAL PARKS	0	0	0	0	0	0	0	0	0	0	0
INDIAN RESERVES	0	4,702	0	0	5,362	242	0	364	3,059	13,729	87,345
FEDERAL ADMINISTRATION OTHERS	0	300	0	0	401	60	0	8	52	821	10,440
TOTAL: ALIENATED LAND	1	31,143	0	0	13,106	580	0	1,667	15,581	62,078	262,766
REGIONAL TOTAL	19	2,884,772	0	9,386	162,309	14,432	0	31,131	255,816	3,357,865	20,434,964

CARIBOO FOREST REGION

FOREST AND NON-FOREST AREA IN HECTARES

STATUS	FOREST LAND					TOTAL	NON FOREST LAND	TOTAL AREA
	IMMATURE	MATURE	RESID.	NSR/DSD	N.C.			
APPROVED TSA UNITS	2,123,944	3,578 731	35,185	147,640	10,878	5 896,378	1,632,929	7,529,307
UNREGULATED UNITS	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	989	21,075	0	95	88	22,247	37,740	59,987
CROWN LAND WITHIN PROV. PARKS								
Total: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	2,124 933	3,599,806	35,185	147,735	10,966	5,918,625	1,670,669	7,589,294
MAJOR PROVINCIAL PARKS	74,751	180,135	27	65	92,750	347,728	302,108	649,836
RESERVES AND MINOR PARKS	5,108	7,360	434	494	20	13,416	2,698	16,114
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	21,450	11,144	0	0	265	32,859	1,227	34,086
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	141	555	0	45	0	741	810	1,551
ACTIVE LEASES AND PERMITS	273	79	0	0	0	352	92	444
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	101,723	199 273	461	604	93,035	395,096	306,935	702,031
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	71,336	62,650	12,739	7,663	1,288	155,676	272,338	428,014
CROWN GRANTS LOCAL ADMINISTRATION	153	8	24	3	0	188	1,275	1,463
NATIONAL PARKS	0	0	0	0	0	0	0	0
INDIAN RESERVES	8,755	7,646	815	1,192	240	18,648	15,954	34,602
FEDERAL ADMINISTRATION OTHERS	7,696	27,078	0	488	23	35,285	7,033	42,318
TOTAL: ALIENATED LAND	87,940	97,382	13,578	9,346	1,551	209,797	296,600	506,397
REGIONAL TOTAL	2,314,596	3,896,461	49,224	157,685	105,552	6,523,518	2,274,204	8,797,722

CARIBOO FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE CONIFEROUS SPECIES OTHER THAN PINES, 17.5 cm +, CD to 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES							
	DOUGLAS FIR	WESTERN RED CEDAR	HEMLOCK	BALSAM	SPRUCE	YELLOW CEDAR	LARCH	TOTAL CONIFER EXCL. PINES
APPROVED TSA UNITS	822,898	179,517	92,432	407,745	1,350,396	1	1	2,852,990
UNREGULATED UNITS	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	45	771	1,808	21,625	24,312	0	0	48,561
CROWN LAND WITHIN PROV. PARKS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	822,943	180,288	94,240	429,370	1,374,708	1	1	2,901,551
MAJOR PROVINCIAL PARKS	26,070	10,529	24,457	59,953	158,915	1,719	0	281,643
RESERVES AND MINOR PARKS	9,292	41	7	145	990	0	0	10,475
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	19,918	0	0	5,022	16,153	0	0	41,093
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	2,159	695	176	36	41	29	0	3,136
ACTIVE LEASES AND PERMITS	46	0	0	13	6	0	0	65
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	57,485	11,265	24,640	65,169	176,105	1,748	0	336,412
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	24,053	688	209	1,355	10,246	1	0	36,552
CROWN GRANTS LOCAL ADMINISTRATION	64	0	0	0	0	0	0	64
NATIONAL PARKS	0	0	0	0	0	0	0	0
INDIAN RESERVES	4,756	2	0	121	991	0	0	5,870
FEDERAL ADMINISTRATION OTHERS	27,813	0	0	67	550	0	0	28,430
TOTAL: ALIENATED LAND	56,686	690	209	1,543	11,787	1	0	70,916
REGIONAL TOTAL	937,114	192,243	119,089	496,082	1,562,600	1,750	1	3,308,879

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Dec. 1987

CARIBOO FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE PINE AND BROAD LEAVED SPECIES, 17.5 cm+, CD TO 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES										
	W. WHITE PINE	LODGEPOLE PINE	YELLOW PINE	WHITE BARK PINE	COTTON WOOD	RED ALDER	BROAD LEAF MAPLE	BIRCH	ASPEN	TOTAL DECID. PLUS PINE	TOTAL CONIF. DECIDUOUS PINES
APPROVED TSA UNITS	7	2,987,047	4,005	21,080	11,821	0	0	14,727	88,890	3,127,577	5,980,567
UNREGULATED UNITS	0	0	0	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	0	556	0	0	29	0	0	15	7	607	49,168
CROWN LAND WITHIN PROV. PARKS	0	0	0	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	7	2,987,603	4,005	21,080	11,850	0	0	14,742	88,897	3,128,184	6,029,735
MAJOR PROVINCIAL PARKS	1,243	156,469	46	8	1,754	74	0	1,384	3,584	164,562	446,205
RESERVES AND MINOR PARKS	0	4,709	0	0	31	0	0	34	490	5,264	15,739
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	0	12,257	0	0	1,133	0	0	1,416	1,941	16,747	57,840
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	4	17	0	4	211	12	0	4	5	257	3,393
ACTIVE LEASES AND PERMITS	0	11	0	0	1	0	0	1	0	13	78
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	1,247	173,463	46	12	3,130	86	0	2,839	6,020	186,843	523,255
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	0	46,373	427	27	1,047	1	0	964	10,630	59,469	96,021
CROWN GRANTS LOCAL ADMINISTRATION	0	1	0	0	0	0	0	0	1	2	66
NATIONAL PARKS	0	0	0	0	0	0	0	0	0	0	0
INDIAN RESERVES	0	5,321	45	1	21	0	0	13	429	5,830	11,700
FEDERAL ADMINISTRATION OTHERS	0	12,455	0	1	0	0	0	14	320	12,790	41,220
TOTAL: ALIENATED LAND	0	64,150	472	29	1,068	1	0	991	11,380	78,091	149,007
REGIONAL TOTAL	1,254	3,225,216	4,523	21,121	16,048	87	0	18,572	106,297	3,393,118	6,701,997

KAMLOOPS FOREST REGION

FOREST AND NON-FOREST AREA IN HECTARES

STATUS	FOREST LAND					TOTAL	NON FOREST LAND	TOTAL AREA
	IMMATURE	MATURE	RESID.	NSR/DSD	N.C.			
APPROVED TSA UNITS	1,661,331	2,323,361	38,431	159,408	19,761	4,202,292	1,419,788	5,622,080
UNREGULATED UNITS	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	104	0	0	0	0	104	0	104
CROWN LAND WITHIN PROV. PARKS	5,700	9,734	0	0	79	15,513	4,905	20,418
Total: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	1,667,135	2,333,095	38,431	159,408	19,840	4,217,909	1,424,693	5,642,602
MAJOR PROVINCIAL PARKS	59,111	180,362	61	27,814	21,082	288,430	304,579	593,009
RESERVES AND MINOR PARKS	9,615	5,802	117	50	158	15,742	2,968	18,710
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	107,704	127,020	887	5,541	2,698	243,850	19,105	262,955
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	37,968	56,086	448	4,527	757	99,786	6,461	106,247
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	214,398	369,270	1,513	37,932	24,695	647,808	333,113	980,921
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	186,852	59,823	11,325	14,779	3,403	276,182	366,759	642,941
CROWN GRANTS LOCAL ADMINISTRATION	5 559	149	0	280	27	6,015	19,140	25,155
NATIONAL PARKS	0	0	0	0	0	0	0	0
INDIAN RESERVES	45,301	22,949	1,810	3,507	733	74,300	83,008	157,308
FEDERAL ADMINISTRATION OTHERS	566	266	54	1	3	890	1,072	1,962
TOTAL: ALIENATED LAND	238,278	83,187	13,189	18,567	4,166	357,387	469,979	827,366
REGIONAL TOTAL	2,119,811	2,785,552	53,133	215,907	48,701	5,223,104	2,227,785	7,450,889

2955F

Dec. 1987

KAMLOOPS FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE CONIFEROUS SPECIES OTHER THAN PINES, 17.5 cm +, CD to 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES							
	DOUGLAS FIR	WESTERN RED CEDAR	HEMLOCK	BALSAM	SPRUCE	YELLOW CEDAR	LARCH	TOTAL CONIFER EXCL. PINES
APPROVED TSA UNITS	895,068	389,915	367,564	744,647	1,342,612	114	39,058	3,778,978
UNREGULATED UNITS	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	0	0	0	0	0	0	0	0
CROWN LAND WITHIN PROV. PARKS.	1,459	0	0	751	6,500	0	0	8,710
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	896,527	389,915	367,564	745,398	1,349,112	114	39,058	3,787,688
MAJOR PROVINCIAL PARKS	29,377	86 079	44,597	62,123	214,931	0	108	437,215
RESERVES AND MINOR PARKS	4,676	554	405	875	1,421	0	529	8,460
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	37,901	5 848	3,755	42,210	124,780	0	154	214,648
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	22,733	39,011	46,903	10,527	23,988	0	866	144,068
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	94,727	131,492	95,660	115,735	365,120	0	1,657	804,391
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	30,399	5,415	3,182	1,655	6,779	0	1,749	49,179
CROWN GRANTS LOCAL ADMINISTRATION	25	0	0	0	0	0	0	25
NATIONAL PARKS	0	0	0	0	0	0	0	0
INDIAN RESERVES	16,992	412	48	593	2,456	0	88	20,589
FEDERAL ADMINISTRATION OTHERS	101	6	10	5	23	0	0	145
TOTAL: ALIENATED LAND	47,517	5,833	3,240	2,253	9,258	0	1,837	69,938
REGIONAL TOTAL	1,038,771	527,240	466,464	863,386	1,723,490	114	42,552	4,662,017

KAMLOOPS FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE PINE AND BROAD LEAVED SPECIES, 17.5 cm+, CD TO 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES										
	W. WHITE PINE	LODGEPOLE PINE	YELLOW PINE	WHITE BARK PINE	COTTON WOOD	RED ALDER	BROAD LEAF MAPLE	BIRCH	ASPEN	TOTAL DECID. PLUS PINE	TOTAL CONIF. DECIDUOUS PINES
APPROVED TSA UNITS	43,515	1,427,109	56 412	27,725	3,938	0	0	10,720	22,638	1,592,057	5,371,035
UNREGULATED UNITS	0	0	0	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	0	0	0	0	0	0	0	0	0	0	0
CROWN LAND WITHIN PROV. PARKS	0	11,795	4	26	0	0	0	0	11	11,836	20,546
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	43,515	1,438,904	56 416	27,751	3,938	0	0	10,720	22,649	1,603,893	5,391,581
MAJOR PROVINCIAL PARKS	1,594	26,590	1,080	29	1,418	0	0	2,330	1,044	34,085	471,300
RESERVES AND MINOR PARKS	148	4,334	161	1	39	0	0	105	240	5,028	13,488
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	314	75,304	2,218	4,210	106	0	0	101	1,463	83,716	298,364
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	3,010	41,141	403	0	290	0	0	513	273	45,630	189,698
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	5,066	147,369	3,862	4,240	1,853	0	0	3,049	3,020	168,459	972,850
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	504	20,977	4,653	13	4,810	0	0	2,367	4,566	37,890	87,069
CROWN GRANTS LOCAL ADMINISTRATION	0	0	80	0	1	0	0	0	1	82	107
NATIONAL PARKS	0	0	0	0	0	0	0	0	0	0	0
INDIAN RESERVES	23	3,172	4,636	26	634	0	0	201	754	9,445	30,034
FEDERAL ADMINISTRATION OTHERS	0	73	22	0	3	0	0	5	28	131	276
TOTAL: ALIENATED LAND	527	24,221	9,391	39	5,448	0	0	2,573	5,349	47,548	117,486
REGIONAL TOTAL	49,108	1,610,494	69,669	32,030	11,239	0	0	16,342	31,018	1,819,900	6,481,917

NELSON FOREST REGION

FOREST AND NON-FOREST AREA IN HECTARES

STATUS	FOREST LAND					TOTAL	NON FOREST LAND	TOTAL AREA
	IMMATURE	MATURE	RESID.	NSR/DSD	N.C.			
APPROVED TSA UNITS	1,775 968	1,122 898	11,294	133,689	33,008	3 076,857	2,318,047	5,394,904
UNREGULATED UNITS	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	0	0	0	0	0	0	0	0
CROWN LAND WITHIN PROV. PARKS	10,056	6,694	0	154	4	16,908	33,678	50,586
Total: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	1,786 024	1 129,592	11,294	133,843	33,012	3,093,765	2,351,725	5,445,490
MAJOR PROVINCIAL PARKS	34,113	52,529	51	3,014	1,051	90,758	181,916	272,674
RESERVES AND MINOR PARKS	10,103	4,821	42	196	220	15,382	19,555	34,937
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	273,068	266,199	14	36,225	1,018	576,524	775,755	1 352,279
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	18,460	17,833	152	7,520	242	44,207	4,408	48,615
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	335,744	341,382	259	46,955	2,531	726,871	981,634	1,708,505
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	266,166	86,895	36,937	29,440	7,680	427,118	179,848	606,966
CROWN GRANTS LOCAL ADMINISTRATION	745	117	0	0	170	1,032	5,408	6,440
NATIONAL PARKS	72,273	57,206	24	3,438	36,281	169,222	262,116	431,338
INDIAN RESERVES	9,356	1,110	0	35	120	10,621	8,228	18,849
FEDERAL ADMINISTRATION OTHERS	7 445	4 936	0	105	445	12,931	7,588	20,519
TOTAL: ALIENATED LAND	355,985	150,264	36,961	33,018	44,696	620,924	463,188	1,084,112
REGIONAL TOTAL	2,477,753	1,621,238	48,514	213,816	80,239	4,441,560	3,796,547	8,238,107

NELSON FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE CONIFEROUS SPECIES OTHER THAN PINES, 17.5 cm +, CD to 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES							
	DOUGLAS FIR	WESTERN RED CEDAR	HEMLOCK	BALSAM	SPRUCE	YELLOW CEDAR	LARCH	TOTAL CONIFER EXCL. PINES
APPROVED TSA UNITS	311,621	253,250	367,186	579,270	964,118	0	136,457	2,611,902
UNREGULATED UNITS	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	0	0	0	0	0	0	0	0
CROWN LAND WITHIN PROV. PARKS	2,339	2,657	4,373	5,395	6,912	0	605	22,281
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	313,960	255,907	371,559	584,665	971,030	0	137,062	2,634,183
MAJOR PROVINCIAL PARKS	5,342	5,595	15,806	35,648	62,642	0	2,805	127,838
RESERVES AND MINOR PARKS	1,646	422	636	1,391	4,977	0	370	9,442
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	50,070	175,132	240,676	104,656	185,415	0	23,754	779,703
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	4,528	15,881	25,896	4,368	11,554	0	702	62,929
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	61,586	197,030	283,014	146,063	264,588	0	27,631	979,912
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	24,037	39,904	48,709	32,034	46,404	0	9,897	200,985
CROWN GRANTS LOCAL ADMINISTRATION	26	12	56	7	22	0	11	134
NATIONAL PARKS	10,373	15,893	37,442	15,168	60,723	0	2,509	142,108
INDIAN RESERVES	972	1	0	6	40	0	33	1,052
FEDERAL ADMINISTRATION OTHERS	744	39	33	2,045	5,078	0	202	8,141
TOTAL: ALIENATED LAND	36,152	55,849	86,240	49,260	112,267	0	12,652	352,420
REGIONAL TOTAL	411,698	508,786	740,813	779,988	1,347,885	0	177,345	3,966,515

NELSON FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE PINE AND BROAD LEAVED SPECIES, 17.5 cm+, CD TO 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES										
	W. WHITE PINE	LODGEPOLE PINE	YELLOW PINE	WHITE BARK PINE	COTTON WOOD	RED ALDER	BROAD LEAF MAPLE	BIRCH	ASPEN	TOTAL DECID. PLUS PINE	TOTAL CONIF. DECIDUOUS PINES
APPROVED TSA UNITS	37,813	551,309	7,626	37,632	4,369	0	0	3,446	5,156	647,351	3,259,253
UNREGULATED UNITS	0	0	0	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	0	0	0	0	0	0	0	0	0	0	0
CROWN LAND WITHIN PROV. PARKS	513	783	16	27	1	0	0	65	10	1,415	23,696
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	38,326	552,092	7,642	37,659	4,370	0	0	3,511	5,166	648,766	3,282,949
MAJOR PROVINCIAL PARKS	4,456	13,279	90	2,279	578	0	0	67	94	20,843	148,681
RESERVES AND MINOR PARKS	90	3,087	36	224	202	0	0	44	28	3,711	13,153
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	22,381	61,151	508	17	62	0	0	1,367	185	85,671	865,374
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	2,002	2,114	10	83	238	0	0	28	39	4,514	67,443
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	28,929	79,631	644	2,603	1,080	0	0	1,506	346	114,739	1,094,651
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	4,670	22,766	764	823	3,881	0	0	1,162	1,571	35,637	236,622
CROWN GRANTS LOCAL ADMINISTRATION	4	88	0	0	2	0	0	21	16	131	265
NATIONAL PARKS	3,101	26,315	29	0	49	0	0	20	15	29,529	171,637
INDIAN RESERVES	0	33	197	4	174	0	0	45	128	581	1,633
FEDERAL ADMINISTRATION OTHERS	176	3,694	7	575	2	0	0	4	19	4,477	12,618
TOTAL: ALIENATED LAND	7,951	52,896	997	1,402	4,108	0	0	1,252	1,749	70,355	422,775
REGIONAL TOTAL	75,206	684,619	9,283	41,664	9,558	0	0	6,269	7,261	833,860	4,800,375

PRINCE GEORGE FOREST REGION

FOREST AND NON-FOREST AREA IN HECTARES

STATUS	FOREST LAND					TOTAL	NON FOREST LAND	TOTAL AREA
	IMMATURE	MATURE	RESID.	NSR/DSD	N.C.			
APPROVED TSA UNITS	5,684,897	9,493,422	13,536	887,415	1,196,996	17,276,266	11,184 767	28,461,033
UNREGULATED UNITS	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	195	0	0	400	0	595	231	826
CROWN LAND WITHIN PROV. PARKS	997	628	0	4	54	1,683	15	1,698
Total: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	5,686,089	9,494,050	13,536	887,819	1,197,050	17,278,544	11,185,013	28,463,557
MAJOR PROVINCIAL PARKS	36,621	93,589	32	2,146	4,583	136,971	299,338	436,309
RESERVES AND MINOR PARKS	37,940	56,207	211	2,514	2,277	99,149	157,994	257,143
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	31,372	147,246	4,055	19,423	486	202,582	25,188	227,770
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	71,782	40,004	55	1,075	1,179	114,095	27,431	141,526
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	177,715	337,046	4,353	25,158	8,525	552,797	509,951	1,062,748
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	312,542	174,766	1,020	28,797	109,857	626,982	563,495	1,190,477
CROWN GRANTS LOCAL ADMINISTRATION	191	220	0	0	49	460	2,670	3,130
NATIONAL PARKS	0	0	0	0	0	0	0	0
INDIAN RESERVES	10,621	10,307	29	1,802	2,980	25,739	15,607	41,346
FEDERAL ADMINISTRATION OTHERS	2,540	4,825	0	322	293	7,980	1,781	9,761
TOTAL: ALIENATED LAND	325,894	190,118	1,049	30,921	113,179	661,161	583,553	1,244,714
REGIONAL TOTAL	6 189,698	10,021,214	18,938	943,898	1,318,754	18,492,502	12,278,517	30,771,019

PRINCE GEORGE FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE CONIFEROUS SPECIES OTHER THAN PINES, 17.5 cm +, CD to 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES							
	DOUGLAS FIR	WESTERN RED CEDAR	HEMLOCK	BALSAM	SPRUCE	YELLOW CEDAR	LARCH	TOTAL CONIFER EXCL. PINES
APPROVED TSA UNITS	185,883	245,647	168,081	3,737,904	8,015,559	0	12,051	12,365,125
UNREGULATED UNITS	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	0	0	0	0	0	0	0	0
CROWN LAND WITHIN PROV. PARKS	0	0	0	82	330	0	0	412
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	185,883	245,647	168,081	3,737,986	8,015,889	0	12,051	12,365,537
MAJOR PROVINCIAL PARKS	1,280	129	86	30,539	81,201	0	38	113,273
RESERVES AND MINOR PARKS	3,163	9,766	4,490	28,159	56,660	0	30	102,268
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	8,965	863	4,617	211,172	81,842	0	0	307,459
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	6,399	2,622	1,021	14,312	46,300	0	0	70,654
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	19,807	13,380	10,214	284,182	266,003	0	68	593,654
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	5,292	3,325	730	9,914	70,139	0	68	89,468
CROWN GRANTS LOCAL ADMINISTRATION	4	0	0	26	23	0	0	53
NATIONAL PARKS	0	0	0	0	0	0	0	0
INDIAN RESERVES	178	0	1	481	6,389	0	3	7,052
FEDERAL ADMINISTRATION OTHERS	0	0	0	37	1,922	0	1	1,960
TOTAL: ALIENATED LAND	5,474	3,325	731	10,458	78,473	0	72	98,533
REGIONAL TOTAL	211,164	262,352	179,026	4,032,626	8,360,365	0	12,191	13,057,724

(1) Volume of T.F.L. 42 included in Approved T.S.A. Units.

PRINCE GEORGE FOREST REGION

NET VOLUME IN 100s OF CUBIC METRES OF MATURE PINE AND BROAD LEAVED SPECIES, 17.5 cm+, CD TO 10 cm TOP

STATUS	NET VOLUME IN 100s OF CUBIC METRES										
	W. WHITE PINE	LODGEPOLE PINE	YELLOW PINE	WHITE BARK PINE	COTTON WOOD	RED ALDER	BROAD LEAF MAPLE	BIRCH	ASPEN	TOTAL DECID. PLUS PINE	TOTAL CONIF. DECIDUOUS PINES
APPROVED TSA UNITS	1,710	5,383,060	0	2,339	289,431	0	0	240,930	1,695,294	7,612,764	19,977,889
UNREGULATED UNITS	0	0	0	0	0	0	0	0	0	0	0
CROWN LAND UNRESERVED	0	0	0	0	0	0	0	0	0	0	0
CROWN LAND WITHIN PROV. PARKS	0	560	0	0	29	0	0	2	45	636	1,048
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE CAN DISPOSE OF TIMBER	1,710	5,383,620	0	2,349	289,460	0	0	240,932	1,695,339	7,613,400	19,978,937
MAJOR PROVINCIAL PARKS	1	41,753	0	4	1,427	0	0	815	9,293	53,293	166,566
RESERVES AND MINOR PARKS	542	27,105	0	646	1,129	0	0	665	5,839	35,926	138,194
TFL: LICENCES INCL. TEMPORARY TENURES BUT EXCL. CROWN GRANTS IN SCHED. "A"	0	14,000	0	0	2,109	0	0	3,563	1,822	21,494	328,953
VANC. WATER DIST., UBC RESEARCH FOREST	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY TENURES OTHER THAN THOSE IN SCHEDULE "A"	12	34,878	0	21	1,885	0	0	2,031	7,846	46,673	117,327
ACTIVE LEASES AND PERMITS	0	0	0	0	0	0	0	0	0	0	0
TOTAL: NON ALIENATED LANDS ON WHICH THE FOREST SERVICE DOES NOT DISPOSE OF TIMBER	555	117,736	0	671	6,550	0	0	7,074	24,800	157,386	751,040
CROWN GRANTS PRIVATE ADMINISTRATION INCL. THOSE IN TFL SCHEDULE "A"	7	74,058	0	3,206	18,746	0	0	7,161	144,046	247,224	336,692
CROWN GRANTS LOCAL ADMINISTRATION	0	28	0	0	11	0	0	9	255	303	356
NATIONAL PARKS	0	0	0	0	0	0	0	0	0	0	0
INDIAN RESERVES	0	5,007	0	0	1,318	0	0	586	8,457	15,368	22,420
FEDERAL ADMINISTRATION OTHERS	0	296	0	0	826	0	0	90	1,039	2,251	4,211
TOTAL: ALIENATED LAND	7	79,389	0	3,206	20,901	0	0	7,846	153,797	265,146	363,679
REGIONAL TOTAL	2,272	5,580,745	0	6,216	316,911	0	0	255,852	1,873,936	8,035,932	21,093,656

(1) Volume of T.F.L. 42 included in Approved T.S.A. Units

VOLUME OF ALL PRODUCTS BILLED 1986-87
(000s of m^3)

	Coast[1]	South Interior	North Interior	Total
Douglas-fir	4447	3813	398	8,658.00
Cedar	6522	1462	297	8,281.00
Hemlock	10731	1002	2007	13,740.00
Balsam	4652	1840	3492	9,984.00
Spruce	1217	5727	10922	17,866.00
Yellow Cedar	641	0	0	641.00
Larch	0	412	0	412.00
Total Conif excl Pine	28,210.00	14,256.00	17,116.00	59,582.00
White Pine	50	180	0	230.00
Lodgepole pine	30	10535	8804	19,369.00
other species	255	229	243	727.00
Total Decid plus pine	335.00	10,944.00	9,047.00	20,326.00
Totals	28,545.00	25,200.00	26,163.00	79,908.00

[1] Includes all of the Vancouver Forest Region

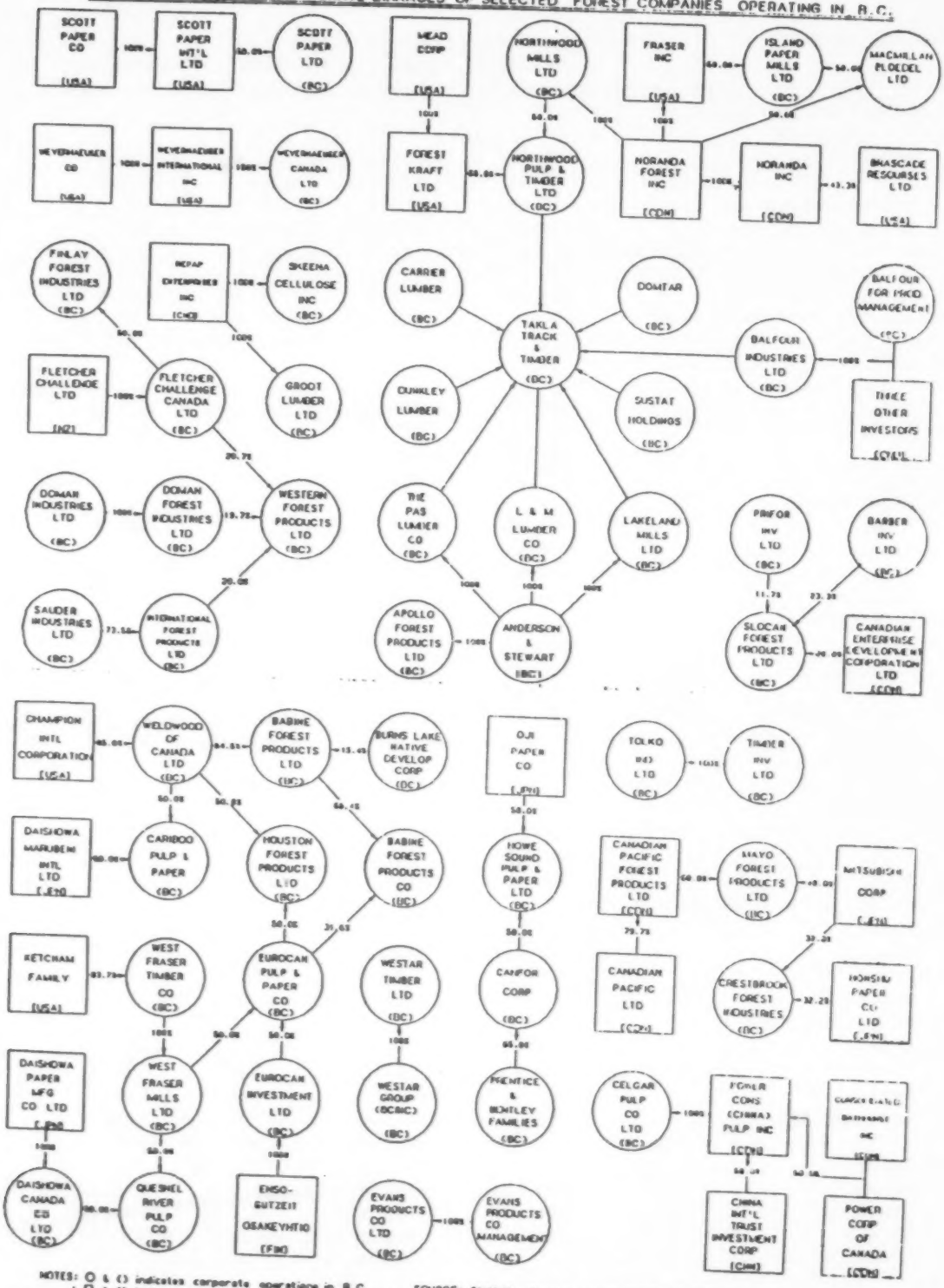
Source: Annual Report Ministry of Forests and Lands 1986-1987

PULP AND PAPER MILLS BY REGION 1987

Company	Location	Product	Annual Capacity (000s tonnes)
Coast Mills			
Fletcher Challenge	Mackenzie	Pulp	200.1
Fletcher Challenge	Crofton	Pulp	648.6
Fletcher Challenge	Crofton	Paper	448.5
Canadian Pacific Forest Prod	Gold River	Pulp	279.5
Canadian Forest Products	Port Mellon	Pulp	224.3
Fletcher Challenge	Duncan Bay	Pulp	686.6
Fletcher Challenge	Duncan Bay	Paper	514.1
Eurocan Pulp & Paper	Kitimat	Pulp	355.4
Eurocan Pulp & Paper	Kitimat	Paper	355.4
Island Paper Mills Ltd.	Annacis Is	Paper	100.1
MacMillan Bloedel	Powell River	Pulp	722.8
MacMillan Bloedel	Powell River	Paper	646.9
MacMillan Bloedel	Harmac	Pulp	383.0
MacMillan Bloedel	Port Alberni	Pulp	420.9
MacMillan Bloedel	Port Alberni	Paper	345.0
Paperboard Industries	Burnaby	Paper	151.8
Scott Paper	New Westm'ter	Pulp	31.1
Scott Paper	New Westm'ter	Paper	79.4
Skeena Cellulose	Prince Rupert	Pulp	436.4
Western Pulp Ltd	Woodfibre	Pulp	224.3
Western Pulp Ltd	Port Alice	Pulp	162.2
South Interior Mills			
Cariboo Pulp & Paper	Quesnel	Pulp	276.0
Celgar Pulp Ltd	Castlegar	Pulp	194.9
Crestbrook Forest Ind Ltd.	Skookumchuk	Pulp	179.4
Quesnel River Pulp Co.	Quesnel	Pulp	193.2
Weyerhaeuser Canada Ltd.	Kamloops	Pulp	426.1
North Interior Mills			
Fletcher Challenge	Mackenzie	Pulp	200.1
Finlay Forest Industries	Mackenzie	Pulp	132.8
Northwood Pulp & Timber	Prince George	Pulp	502.0
Pr. Geo./Intercontinental	Prince George	Pulp	502.0
Pr. Geo./Intercontinental	Prince George	Paper	101.8

Source: Industry Development and Marketing Branch
Ministry of Forests

OWNERSHIP AND INTER-CORPORATE LINKAGES OF SELECTED FOREST COMPANIES OPERATING IN B.C.


SCOTT PAPER CO (USA)
SCOTT PAPER INT'L LTD (USA)
SCOTT PAPER LTD (BC)
MEAD CORP (USA)
NORTHWOOD MILLS LTD (BC)
FRASER INC (USA)
ISLAND PAPER MILLS LTD (BC)
MACMILLAN BLOEDEL LTD
WEYERHAEUSER CO (USA)
WEYERHAEUSER INTERNATIONAL INC (USA)
WEYERHAEUSER CANADA LTD (BC)
FOREST KRAFT LTD (USA)
NORTHWOOD PULP & TIMBER LTD (BC)
NORANDA FOREST INC (CDN)
NORANDA INC (CDN)
BNASCADE RESOURSES LTD (USA)
FINLAY FOREST INDUSTRIES LTD (BC)
REPAP ENTERPRISES INC (CND)
SKEENA CELLULOSE INC (BC)
CARRIER LUMBER (BC)
DOMTAR (BC)
BALFOUR FOR PROD MANAGEMENT (PC)
TAKLA TRACK & TIMBER (BC)
BALFOUR INDUSTRIES LTD (BC)
FLETCHER CHALLENGE LTD (NZ)
FLETCHER CHALLENGE CANADA LTD (BC)
GROOT LUMBER LTD (BC)
DUNKLEY LUMBER (BC)
SUSTAT HOLDINGS (BC)
THREE OTHER INVESTORS (CDN)
DOMAN INDUSTRIES LTD (BC)
DOMAN FOREST INDUSTRIES LTD (BC)
WESTERN FOREST PRODUCTS LTD (BC)
THE PAS LUMBER CO (BC)
L & M LUMBER CO (BC)
LAKELAND MILLS LTD (BC)
PRFOR INV LTD (BC)
BARBER INV LTD (BC)
SAUDER INDUSTRIES LTD (BC)
INTERNATIONAL FOREST PRODUCTS LTD (BC)
APOLLO FOREST PRODUCTS LTD (BC)
ANDERSON & STEWART (BC)
SLOCAN FOREST PRODUCTS LTD (BC)
CANADIAN ENTERPRISE DEVELOPMENT CORPORATION LTD (CDN)
CHAMPION INTL CORPORATION (USA)
WELDWOOD OF CANADA LTD (BC)
BABINE FOREST PRODUCTS LTD (BC)
BURNS LAKE NATIVE DEVELOP CORP (BC)
OJI PAPER CO (JPN)
TOLKO (84) LTD (BC)
TIMBER INV LTD (BC)
DAISHOWA MARUBENI INTL LTD (JPN)
CARIBOO PULP & PAPER (BC)
HOUSTON FOREST PRODUCTS LTD (BC)
BABINE FOREST PRODUCTS CO (BC)
HOWE SOUND PULP & PAPER LTD (BC)
CANADIAN PACIFIC FOREST PRODUCTS LTD (CDN)
MAYO FOREST PRODUCTS LTD (BC)
MITSUBISHI CORP (JPN)
KETCHAM FAMILY (USA)
WEST FRASER TIMBER CO (BC)
EUROCAN PULP & PAPER CO (BC)
WESTAR TIMBER LTD (BC)
CANFOR CORP (BC)
CANADIAN PACIFIC LTD (CDN)
CRESTBROOK FOREST INDUSTRIES (BC)
DAISHOWA PAPER MFG CO LTD (JPN)
WEST FRASER MILLS LTD (BC)
EUROCAN INVESTMENT (BC)
WESTAR GROUP (BCBC) (BC)
PRENTICE & BENTLEY FAMILIES (BC)
CELGAR PULP CO LTD (BC)
CHINA INT'L TRUST INVESTMENT CORP (CHN)
POWER CORP OF CANADA (CDN)
DAISHOWA CANADA CO LTD (BC)
QUESHEL RIVER PULP CO (BC)
ENSO-GUTZEIT OSAKEYHTIO (FIN)
EVANS PRODUCTS CO LTD (BC)
EVANS PRODUCTS CO MANAGEMENT (BC)

NOTES: O & ( ) indicates corporate operations in B.C.
: □ & [ ] indicates corporate operations outside B.C.

SOURCE: Statistics Canada, INTERCORPORATE OWNERSHIP, Annual.
: Corporate annual reports and quarterly statements.

PREPARED BY: Industry Development & Marketing and Valuation Branches, Ministry of Forests, 1988-12

FILENAME : PROVINCE October 27, 1988
B.C. PULP MILLS : PRODUCTION AND FIBRE SUPPLY SUMMARY (1987)

PROVINCIAL SUMMARY

	UNITS	COAST	INTERIOR	PROVINCE
PULP PRODUCTION/SHIPMENTS				
1. PULP PRODUCTION				
- chemical pulp prodn	000 mt	3,021.1	2,257.8	5,278.9
- CTMP or TMP pulp prodn	000 mt	1,164.0	321.7	1,485.7
- groundwood pulp prodn	000 mt	233.0	0.0	233.0
- TOTAL PRODUCTION	000 mt	4,418.1	2,579.6	6,997.7
2. TOTAL MARKET PULP PRODUCTION	000 mt	2,137.6	2,460.9	4,598.5
3. TOTAL MARKET PULP SHIPMENTS	000 mt	2,226.9	2,457.1	4,683.9
4. NEWPRINT PRODUCTION	000 mt	1,824.0	0.0	1,824.0
5. NON-NEWSPRINT PAPER PRODN	000 mt	443.5	103.6	547.1
FIBRE RECEIPTS				
1. PURCHASED FIBRE				
- chips	000 m3	7,920.7	9,231.5	17,152.2
- sawdust	000 m3	885.5	447.2	1,332.7
- logs	000 m3	1,712.2	0.0	1,712.2
- Subtotal	000 m3	10,518.4	9,678.7	20,197.1
2. INTERNAL FIBRE				
- chips	000 m3	7,139.5	5,023.2	12,162.8
- sawdust	000 m3	239.2	225.6	464.8
- logs	000 m3	3,810.2	0.0	3,810.2
- Subtotal	000 m3	11,188.9	5,248.9	16,437.7
3. TOTAL RECEIPTS				
- chips	000 m3	15,060.2	14,254.7	29,314.9
- sawdust	000 m3	1,546.1	672.8	2,218.9
- logs	000 m3	5,522.4	0.0	5,522.4
- Subtotal	000 m3	21,707.3	14,927.5	36,634.8
FIBRE INVENTORY				
1. OPENING INVENTORY				
- chips	000 m3	1,143.4	588.1	1,731.4
- sawdust	000 m3	0.0	21.4	21.4
- logs	000 m3	104.0	0.0	104.0
- Subtotal	000 m3	1,247.4	609.5	1,856.8
2. FIBRE USAGE THIS PERIOD				
- chips	000 m3	18,122.7	13,249.3	31,372.0
- sawdust	000 m3	938.6	666.9	1,605.5
- logs	000 m3	2,374.2	0.0	2,374.2
- Subtotal	000 m3	21,435.4	13,916.2	35,351.6
3. CLOSING INVENTORY				
- chips	000 m3	(546.1)	1,593.5	1,047.5
- sawdust	000 m3	(1.5)	27.3	25.8
- logs	000 m3	1,521.6	0.0	1,521.6
- Subtotal	000 m3	1,519.2	1,620.8	3,140.1
FIBRE EXPORTS				
- chips	000 m3	814.6	1,611.0	2,425.6
- sawdust	000 m3	43.9	3.4	47.3
- TOTAL	000 m3	858.5	1,614.4	2,472.9
RATIOs				
1. TONNES PER CUBIC METRE	mt/m3	0.21	0.19	0.20
2. CUBIC METERS PER TONNE	m3/mt	4.85	5.39	5.05

PULP PRODUCTION 1987
(000s of tonnes)

Product	REGION Coast	Interior	Total
Pulp			
Chemical	3021.1	2257.8	5278.9
CTMP or TMP	1164.0	321.7	1485.7
Groundwood	233.0	0.0	233.0
Total pulp production	4418.1	2579.6	6997.7
Total market pulp production	2137.6	2460.9	4598.5
Total market pulp shipments	2226.9	2457.1	4683.9
Newsprint Production	1824.0	0.0	1824.0
Other paper production	443.5	103.6	547.1

Source: Industry Development and Marketing Branch, Ministry of Forests